## EGYPT

'IIIROUGH THE STEREOSCOPE



Division' DT55 Section . E 8

## EGYPT

## THROUGH THE STEREOSCOPE

A Journey Through the Land of the Pharaohs

CONDUCTED BY

JAMES HENRY BREASTED, Ph.D.

Professor of Egyptology and Oriental History in the University of Chicago, Director of Haskell Oriental Museum of the University of Chicago, Director of the Egyptian Expedition of the University of Chicago

## UNDERWOOD \& UNDERWOOD

New York London
Ottawa, Kansas
San Francisco, California

Toronto, Canada
Bombay, India

## Copyright, 1905, By UNDERWOOD \& UNDERWOOD, New York and London (entered at stationers' hall)

All stereographs copyrighted

MAP SYSTEM
Patented in the United States, August 21, 1900 Patented in Great Britain, March 22, 1900 Patented in France, March 26, 1900. S.G.D.G. Switzerland, + Patent 21,211

All rights reserved

Printed in the United States

## CONTENTS

PAGE.
Introduction ..... 11
The Story of Egypt. ..... 17
The Itinerary ..... 47
STANDPOINTS IN EGYPT
1 Pompey's Pillar, the sailors' landmark, and modern Alexandria, N. toward the sea ..... 53
2 Cairo, home of the Arabian Nights, greatest city of Africa, N. W. from Saladin's Citadel to Nile ..... 56
3 Citadel and Mohammed Ali Mosque, beyond Babel- Wezir cemetery, at feast of Bairam, Cairo ..... 64
4 Cairo, looking S. W. across city to the great Pyra- mids that furnished stone for its buildings ..... 68
5 A "ship of the Desert" passing tombs of bygone Moslem rulers outside east wall of Cairo. ..... 71
6 Tomb Mosque of Sultan Kait Bey from the N. E.- most beautiful of the tombs of Cairo. ..... 74
7 The prayer-niche (S. E., towards Mecca), and pulpit in the tomb mosque of Kait Bey, Cairo ..... 76
8 The Holy Carpet Parade with the Mahmal, before the departure of the pilgrims for Mecca, Cairo ..... 78
9 The harem windows in the court of a wealthy Cairene's house ..... 84
PAGE
10 Diorite statue of King Khafre, builder of the Second Pyramid at Gizeh, Cairo. ..... 87
11 The famous wooden statue called the Shekh el- Beled, in the Museum, Cairo. ..... 90
12 The body of Sethos I who lived in the middle of the fourtcenth century, B. C., Museum of Cairo ..... 94
13 The magnificent jewelry of the Pharaohs (Queen Ahhotep, seventeenth century B. C.) ; Cairo Museum ..... 97
14 The stela of Amenophis III, raised by Merneptah and bearing the earliest mention of Israel. ..... 99
15 The great Nile Bridge at Cairo open for the passage of the daily fleet of cargo boats ..... 102
16 The road to the Pyramids, westward toward Gizeh from near Cairo. ..... 104
17 The great Pyramid of Gizeh, a tomb of 5,000 years ago, from the S. E ..... 109
18 King Khufu's tomb, the great Pyramid of Gizeh, and the sepulchers of his nobles (from N. W.). ..... 111
19 Looking up the N. E. corner of the Great Pyramid where tourists ascend. ..... 115
20 View from the summit of the Great Pyramid E. over the Valley of the Nile. ..... 118
21 Second Pyramid with crown of original casing, S. W. from summit of Great Pyramid. ..... 122
22 Looking down the S . W. corner of the Great Pyra- mid upon the mastabas of Khufu's lords ..... 125
23 Entrance to the Great Pyramid, the sepulcher of Khufu (in north face), seen from below. ..... 128
24 Looking down the main passage leading to Khufu's sepulcher within the Great Pyramid. ..... 130
PAGE.
25 Khufu's sarcophagus, broken by robbers, in the sepul- cher-chamber of the Great Pyramid ..... 132
26 Ruins of the granite temple by the Sphinx, with the Great Pyramid of Gizeh on the N. W ..... 137
27 The great Sphinx of Gizeh, the largest royal por- trait ever hewn ..... 140
28 Statue of Ramses II, an embellishment of his now vanished temple at Memphis ..... 144
29 The earliest occupation of men and the first attempt at a pyramid, Sakkarah ..... 147
30 Quarry chambers of Masara whence came the blocks for the Great Pyramid ..... 151
31 The sole survivor of a great city, the obelisk of Heliopolis ..... 152
32 The brick store-chambers of Pithom, the city built by Hebrew bondsmen (looking north) ..... 156
33 Dahabiyehs on the river ready for the journey to the upper Nile ..... 158
34 Watching a sand whirlwind from top of Hawara Pyramid (view S. E. to pyramid of Illahun) ..... 161
35 An Egyptian Shaduf, the oldest of well-sweeps, lift- ing the Nile waters to the thirsty fields. ..... 167
36 An Egyptian Sakieh or ox-driven bucket pump, rais- ing water for irrigation ..... 168
37 "Thou shalt not muzzle the ox when he treadeth out the corn." Threshing in modern Egypt ..... 169
38 The winnowing of the grain after threshing-field work of peasant laborers ..... 171
39 Brick-making, the task of the Hebrews as seen to- day among the ruins of Cracodilopolis ..... 172
PAGE.
40 The tomb of a feudal lord at Benihasan, built about 1900 B. C. ..... 176
41 Cliff-tombs of the lords of Assiut, the King-makers of 4,000 years ago ..... 181
42 Assiut, the largest city of Upper Egypt, seen from the cliffs at the west ..... 184
43 The temple of Sethos I, view S. W. to its dismantled front, Abydos ..... 187
44 Columns of the great hypostyle temple of Sethos I at Abydos ..... 191
45 Sethos I and his son Ramses II worshipping their ancestors, in Sethos' great temple, Abydos ..... 194
46 The beautiful temple of Hathor at Denderah, view S. over remains of a vanished city ..... 197
47 Across the plain of Thebes and past the Memnon statues, from the western cliffs towards Luxor. ..... 202
48 Magnificent desolation, the deserted temple of Luxor, S. W. from top of the first pylon ..... 207
49 The Moslem mosque in the court of Ramses II, at Luxor Temple, Thebes ..... 211
50 The most beautiful colonnade in Egypt; S. across court of Amenophis III, Luxor Temple, Thebes ..... 213
51 The obelisk of Ramses II and front of the Luxor Temple (view to S. W.), Thebes ..... 215
52 Grand Avenue of Rams, one of the southern ap- proaches to the temple of Karnak, Thebes. ..... 218
53 The entire length of the gigantic temple of Amon at Karnak (view W.), Thebes ..... 220
54 Excavating the famous avenue of rams, E. to temple of Karnak, Thebes ..... 222
PAGE.
55 Avenue of sacred rams, leading from river to W. entrance (after excavation) ; Karnak, Thebes ..... 224
56 The great court of the Karnak temple seen (S. E.) from the top of the first pylon, Thebes ..... 226
57 The famous colonnade of the great Hypostyle Hall in the temple of Karnak, Thebes ..... 231
58 Looking across the Sacred Lake (N. N. W.) to the great Hypostyle Hall of Karnak, Thebes ..... 233
59 Middle aisle of the great Hypostyle and the obelisk of Thutmosis I, Karnak, Thebes ..... 236
60 The tallest obelisk in Egypt, erected by Queen Makere (N.) in Karnak temple at Thebes ..... 239
(53) (Return) ..... 242
61 Plants and animals brought to Egypt from the Pharaoh's campaigns in Syria, Karnak, Thebes.. 244
62 War reliefs of Sethos I on N. wall outside the Hypo- style of Karnak temple, Thebes. ..... 246
63 Records of the campaign of Shishak, who captured Jerusalem, relief at Karnak, Thebes ..... 248
64 Colossal "Memnon" statues at Thebes; the farther one used to emit a cry at sunrise. ..... 251
65 The Ramesseum, mortuary temple of Ramses II, N. W. towards tombs in the cliffs, Thebes ..... 254
66 From roof of the Ramesseum, past the fallen colossus of Ramses II, S. E. over plain of Thebes ..... 258
67 Plain of Thebes and the Colossi of Memnon, seen at the S . from roof of the Ramesseum. ..... 261
68 Looking S. over Theban plain and Temples of Medi- net Habu from cemetery of Abd el-Kurna ..... 263
PAGE.
69 Painted tomb chamber of Prince Sen-Nofer, hewn in rock of the western cliffs, Thebes ..... 265
70 Buried for ages-colonnaded terraces of Queen Makere's temple, Der el-Bahri (N.), Thebes ..... 268
71 Queen Makere's expedition to E. Africa, sixteenth century B. C., reliefs at Der el-Bahri, Thebes ..... 271
72 From the ligh cliffs above Der el-Bahri S. E. across the plain to Luxor and the Nile, Thebes. ..... 274
73 Down the Nile (N. E.) across the western cliffs of Thebes ..... 277
74 Valley of the Kings' tombs where the great conquer- ors of Egypt were buried. ..... 279
75 Descending gallery in tomb of Sethos I, Valley of the Kings' Tombs, Thebes ..... 282
(65) (Return) ..... 284
76 Looking north to the mortuary temple of Sethos I, at Thebes ..... 287
77 The first pylon of Ramses III's great mortuary temple at Medinet Habu (view N.), Thebes ..... 291
78 The hunting of the wild bull, depicted on temple wall of Ramses III, Medinet Habu, Thebes ..... 294
79 Scenes of battle and the chase on wall of temple of Ramses III, Medinet Habu, Thebes. ..... 295
80 Walled city of El Kab , ancient capital of Upper Egypt, S. W. from the door of a cliff-tomb. ..... 298
81 The Pylon and Court of the temple of Horus at Edfu (looking E. to the Nile) ..... 301
82 The wonderfully preserved temple of Edfu, seen (N.) from top of first pylon. ..... 303
83 The Holy of Holies and granite shrine for the divine image, temple of Edfu ..... $30 G$
PAGE.
84 Assuan and the island of Elephantine (S.) from the western cliffs of the cemetery ..... 308
85 Tomb of Harkhuf, a frontier baron in the days of the pyramid builders, Assuan ..... 310
86 The Nilometer (measurer of inundations), Island of Elephantine, first cataract ..... 313
87 Ninety-two foot obelisk still lying in the Assuan granite quarry at the first cataract ..... 315
88 Remarkable inscription of a Seven Years' Famine, on the Island of Sehel (first cataract) ..... 318
89 The templed island of Philæ, the "Pearl of Egypt," now doomed to destruction (view S.) ..... 321
90 Looking down (N. E.) upon the island of Philæ and its temples from the island of Bigeh. ..... 323
91 The great Assuan Dam, N. W. from the first pylon of the Philæ Temple. ..... 326
92 The Nubian temple of Kalabsheh, built in the days of the Roman emperor Augustus (view E.). ..... 328
93 Kasr Ibrim (the fort of Ibrim) and a Nile vista to the N. N. E. in lower Nubia ..... 330
94 The grotto temple of Abu Simbel seen N. W. from a boat on the Nile. ..... 333
95 The sixty-five foot portrait statues of Ramses II be- fore rock-hewn temple of Abu Simbel. ..... 33.4
96 Looking up river across the front of Abu Simbel temple, from the sand-drift at north ..... 337
97 Interior of the rock-hewn temple of Abu Simbel- Holy of Holies in rear and statues of gods ..... 340
98 Second cataract of the Nile from the S. W., the first obstruction to navigation for 1,000 miles ..... 842

PAGE.
99 The tomb of the Mahdi at Omdurman. (Kerreri
hills at left, scene of Kitchener's victory). Sudan. 344
100 Governor's palace, and armored steamer leaving Khartum for Fashoda and the Blue Nile, Sudan.. 348

## MAPS AND PLANS

All (except the last) bound in booklet at the end of this volume.

1 Eastern Hemisphere.
2 General Map of Ancient Egypt.
3 The Nile from the Mediterranean to Khartum.
4 Environs of Cairo.
5 Pyramids of Gizeh.
6 The Nile from Cairo to Feshn, including the Fayum and the Pyramids.

7 Temple of Sethos I at Abydos.
8 District of Thebes.
9 West Shore, Necropolis of Thebes.
10 The Temple of Luxor.
11 Plan of Karnak.
12 The Great Temple of Ammon at Karnak.
13 Ramesseum.
14 Temple of Der el-Bahri.
15 Medinet Habu.
16 Temple of Horus at Edfu.
17 Environs of Assuan.
18 The Island of Philæ.
19 Abu Simbel.
20 Omdurman and Khartum.
Plan of the interior of the Great Pyramid, page 129

## INTRODUCTION

In connection with the duties of university teaching and its modern obligation to carry on constant research, it has also been my privilege during the last ten years, to begin the work of making a public wider than that of the university lecture-room, acquainted with the life, customs, history, and monuments of the ancient Egyptians. In this latter attempt I have met with a number of different plans for private study, for class study, for lecture courses and the like, among women's clubs, extension centres, literary societies, and similar organizations. I have been and am still constantly appealed to for outline studies and lists of books, which will furnish the individual student and the reading class or studycircle with the material necessary for their study. Heretofore I have never been able to find any books or material which could furnish graphic reproductions of the remains still surviving in the ancient lands of the East, or of those lands and their people as they are today, coupled with an adequate account of their long history, of their life and customs.

It was, therefore, with peculiar satisfaction that I made the acquaintance of this system of stay-at-home travel, the great merits of which are but beginning to be appreciated. By its use an acquaintance can be gained, here at home, with the wonders of the Nile

Valley, which is quite comparable with that obtained by traveling there. In my judgment there is no other existent means by which this result can be accomplished. The map system, simple, ingenious, and pedagogically sound, first furnishes a clear idea of locality in every case; and with this in mind, these superb stereographs furnish the traveler, while sitting in his own room, a vivid prospect as through an open window, looking out upon scene after scene, from one hundred carefully selected points of view along the Nile. By this means, then, the joys of travel can be extended to that large class of our people, who thirst for an acquaintance with the distant lands of other ages, but are prevented by the expense involved, or by the responsibilities of home, business or profession.

It was with this conviction, that I have undertaken, in the midst of a heavy burden of numerous other duties, the task of standing with the traveler at every point of view, to be his cicerone, and to furnish him with the indispensable wealth of associations, of historical incident, or archæological detail suggested by the prospect spread out before him. Nowhere in the ancient world have its great monuments been preserved in such numbers, or so completely as in the Nile Valley, and nowhere, therefore, is the visitor carried back into the remote past so vividly as among the myriad monuments that rise along the shores of the Nile. Realizing, then, that this land of monumental marvels, so rich in the works of men, has in the past been closed to the average
man, and accessible only to him whose means and leisure permitted him to make the journey of the Nile, I have here endeavored to work out this system of travel for Egypt. It enables the great host of those whose constant dream of travel has heretofore remained unrealized to stand under the shadow of the greatest architectural and other monumental works of the ancient Orient and to feel with the sense of substantial reality that these venerable structures are actually rising yonder before the beholder's eye. These experiences in the presence of all the myriad witnesses of a mighty past, can not only be a source of untold pleasure and instruction, but also, can enormously expand the horizon of daily life, more truly making the beholder a "citizen of the world" than he can ever hope to be without actually visiting these distant lands.

In the preparation of the following pages, I have constantly had my eyes within the hood of the stereoscope, and I cannot forbear to express here the growing surprise and delight, with which I observed as the work proceeded, that it became more and more easy to speak of the prospect revealed in the instrument, as one actually spread out before me. The surprising depth and atmosphere with which the scientifically constructed instrument interpreted what were actually but bits of paper and pasteboard, were a revelation; indeed, I constantly sat by an open window looking out'over the actual ruins of the Nile Valley, which I could study, one after another, at will. To the believing beholder
there are precious moments, when the mind is perfectly convinced of the reality of the scene before him, and such moments, persistently sought and repeated, come more and more easily as one accustoms himself to the instrument, until afterward the mind looks back upon it all, with essentially all the sensations of having seen the reality; and an actual visit to the place can do little more. Moreover, by the repeated use of the stereograph, the scene can be often reimpressed upon the mind's eye, and herein lies one of the greatest advantages of this system of stay-at-home travel, that the trip may be made as often as one likes. Much more might be said upon this subject of the possibilities of the stereoscope, but I can only refer the reader to such opinions as that of Oliver Wendell Holmes,* to the very useful literature on the subject issued by the publishers, and to my own remarks in comection with the Itinerary (pages 49-51).

It should, also, be said here, that the selection of the stereographed scenes employed, was facilitated by the dispatch of a special artist in the employ of the publishers, to make on the spot a large list of stereographs, indicated by the author, who located the position for each stereograph on maps and plans, the list being accompanied by full instructions. Were it possible to eliminate the element of accident in the production of such

[^0]a series of stereographs, there would be no difficulty in placing in the author's hands by this method, all and exactly the stereographs wanted. Happily there are in this series only three cases in which the author would have made a different selection had accident not prevented. The selection of the places to be visited and studied by this system has not been an easy task, and another familiar with the country and its monuments might have made a different choice in some cases. The number of considerations involved in making a representative selection is not small, and every effort has been put forth to be fair to all these considerations.

Should this book fall into the hands of an oriental scholar, let him be assured that the orthography of the Arabic proper names is as unsatisfying to the author as to him. It should, however, be remembered that this book is intended for practical purposes, in the hands of readers who know nothing about and care less for the intricacies of Arabic orthograply,-readers to whom the complications of a full and correct system of transliteration, however carefully explained, would mean nothing, and cause only vexation and confusion. In the reproduction of such names, the simplest possible form has been used, with practically no diacritical marks. If the reader unfamiliar with Arabic will pronounce all the vowels as in Italian, or the continental languages, they will be nearly enough correct for his purposes. The necessity of maintaining the sense of location is sufficient reason for the colloquial tone
adopted in these rambles. This also will explain the insistent repetition of the bearings and orientation of each position, a repetition which experience has shown to be essential and useful.

The author wishes here to acknowledge great obligation to Herr Karl Baedeker for permission to use the admirable maps and plans from his unsurpassed guidebook of Egypt. With the exception of the first three, all the maps and plans in the accompanying series are reproduced from his "Egypt." The large map of Egypt (No. 3) was drawn in Berlin under the author's supervision, from the atlas of ancient Egypt, issued by the Egypt Exploration Fund.

James Henry Breasted.

The University of Chicago, April 1, 1905.

## THE STORY OF EGYPT

There is no people whose career can be followed through so long a period as that of the people of Egypt. The civilization of Babylon may be older, though that question is still under debate, but Babylonia so early disappeared as a nation, that the length of its career is shorter by many centuries than that of Egypt. Egypt still survives with a people of the same mental characteristics and the same physical peculiarities as we find in those subjects of the Pharaohs who built the pyramids. They have changed their language once and their religion twice, but they are still Egyptians as of old, pursuing the same arts, following the same occupations, holding the same superstitions, living in the same houses, using the same medicines, and employing the same devices for irrigation and cultivation of the fields, which the student of the monuments finds among their ancestors five thousand years ago. The amazing persistence of the chief elements of their civilization, the survival of these things into our own times, is due in large measure, if not solely, to the very unusual natural conditions under which they lived. We must therefore note briefly the geography and climate of the Nile valley, if we would at all understand the marvelous people who so early found a home there.

The whole northern end of the African continent is traversed from the Atlantic on the west to the Red Sea on the east by a vast desert, which is continued eastward through Arabia and far into the heart of Asia (Map 1). This desert of two continents is crossed by two great river valleys: in Africa by that of the Nile; in Asia by the Euphrates valley, supplemented by that of the Tigris. These two great river valleys, one in Africa, the other in Asia, formed the home of two remarkable peoples, to whom the classic world of Europe, and through it we ourselves, owe the
fundamentals of civilization, which were there developed from the most primitive beginnings to a high degree of perfection, and then transmitted to the European nations in the basin of the Mediterranean. He who would know the story of man, and particularly its first chapter, will find it necessary to delve long and patiently among the surviving remains in these two river valleys, for there is the earliest human culture, which we are able to date with approximate accuracy, as compared with the vast range of uncertainty in the date of the remains of early man, found elsewhere by the anthropologist, like the relics of the cave-dwellers of prehistoric Europe. We are to journey together through one of these ancient cradles of civilization, and I repeat, we must know, before we enter upon the journey, something about the valley, its climate and the other natural conditions, among which its people lived.

Rising at a point three degrees south of the equator, the Nile flows northward through equatorial Africa, until, fifteen hundred miles after passing the lakes called Victoria and Albert Nyanza, it is joined from the east by a great affluent coming out of Abyssinia. From the color of the water the western river is known as the White Nile, while the eastern is called the Blue Nile (Map 2). After their junction, the common stream is the Nile proper. The territory thus far traversed by the river is a vast and fertile region known as the Sudan, which means "blacks" and refers, of course, to the race inhabiting the region. At the junction of the two Niles is the frontier town of Khartum; about one hundred and forty miles north of this place, the Nile receives another tributary from the east, the Atbara, which is its last affuent; on all its long journey to the sea it receives no further contribution to its waters, but must make its way through the desert alone. For just below its junction with the Atbara, the Nile enters the table land of Nubian sandstone, which there underlies the Sahara; for over a thousand miles the river must fight its way through the tough sandstone which forms its bed, and not the countless
ages which have elapsed since it first debouched upon the Sahara, have sufficed to wear away a perfect channel.

In many places the huge and stubborn rocks are piled in masses in the stream, dividing the waters into numerous, tortuous channels, where they descend with rush and roar, only to meet with similar obstructions below. These are the so-called cataracts of the Nile, which break the stream at ten or more points; but they fall into six main groups, so that it is usually stated, that the cataracts of the Nile are six in number. They are not what we generally understand by the term cataract, as there is no sudden and great fall as in our cataract at Niagara. Finally the river escapes from the last obstruction, an outcropping of granite which thrusts up its rough shoulder at Assuan, where the stream emerges upon an unobstructed course of some seven hundred miles to the sea. The reason for this difference is, that the bed of the Sahara, at a point about sixty-five niles below Assuan, suddenly changes to limestone, a less refractory material, through which the river has worn a wide, deep channel. Something over a hundred miles before reaching the sea, the river divides into two branches, the western, called the Rosetta mouth, and the eastern, known as the Damietta mouth; but in antiquity there were seven such Delta mouths of the river. From the source to the mouth it is about four thousand miles in length and thus ranks with the longest rivers of the world. The Delta was, of course, originally a large bay, which has been gradually filled by silting up from the river.

The valley of the Nile is simply a vast cañon cut across the eastern end of the Sahara from south to north by the age-long erosion of the river. This cañon, in the long, dreary stretch of the sandstone country above Assuan, is shallow and narrow, so much so that it can in places hardly be termed a cañon; but below Assuan, where the limestone begins, the cañon is fourteen to thirty-two miles wide, and the cliffs or bluffs on either side are frequently several hundred feet high. Flanking these cliffs are the desert wastes, less barren
and forbidding on the east. We shall often take our stand upon the crest of these cliffs and overlook the valley, so that we need not further describe them here. Egypt proper extended from the sea only to Assuan, or the first cataract, as the last cataract obstructing the river is usually called, because it is the first one met in the ascent. Egypt was and is, therefore, a vast trench in the Sahara, to which we must add the Delta, the scattered oases in the desert on the west, the eastern desert to the Red Sea, with the greater part of the Peninsula of Sinai. Of cultivable soil the narrow valley above the Delta contains less than 5,000 square miles, the Delta itself somewhat more than that, so that the entire area of habitable country is under 10,000 square miles. Within such narrow limits as these, about equal to the area of Vermont and Rhode Island combined, developed the remarkable civilization which we are to study. It will be seen that we have here natural boundaries producing unusual isolation; on the north the almost harborless coast of the Delta ; on the east and west the desert, and on the south the cataracts. Here the earliest Egyptians lived in the greatest security and seclusion, and under such conditions have not only developed but also preserved many striking and individual characteristics.

The climate, although not absolutely rainless as often stated, was and is effectually so, as far as agriculture is concerned. The people were thus forced to depend upon the annual inundation from the river for the fertilization of their lands, as well as their irrigation after the waters receded. Of all this we shall see many examples when we have entered the country, and we shall not wonder that the people early developed mechanical arts, when forced to the daily use of clever devices for the utilization of the river, whether in irrigation or navigation. They enjoyed a climate which was, to be sure, intensely hot in summer, but in winter equable and delightful to a degree that is now drawing thousands of convalescents to Egypt every season. Here, then, recent excavations enable us to trace the prehistoric Egyptian, in the fifth or possibly the sixth mil-
lennium before Christ, as he passes from the use of stone and pottery, to the conquest of metals, the acquisition of writing and an ordered civilization under a king.

The earliest Egyptians were probably related to the Libyans, and at some remote period of their history, they were invaded by tribes of Semites, as in the seventh century A. D., the Arabs came in and made conquest of the country, at the beginning of the spread of Islam. This prehistoric invasion brought Semitic elements into the language and gave it a fundamentally Semitic structure. Doubtless also some things hitherto unknown there, were imported into the material culture of the earliest Nile dwellers. The resulting composite race, of African-Libyan and Semitic-Asiatic origin, is that which emerges into the light of history, in the middle of the forty-third century before Christ, when they had already sufficient knowledge of astronomy to introduce a calendar with a year of three hundred and sixty-five days. This is the earliest fixed date in history ( 4241 B. C.).

We dimly see at this remote period, two kingdoms on the Nile: one in the south, occupying the valley proper; the other in the north, that is, the Delta. These two kingdoms of Upper and Lower Egypt were united some centuries later into one nation, under one king, and thus Egypt, as a homogeneous nation, is born. Menes, the king under whom this union was accomplished, thus heads the long list of dynasties and the line of Pharaohs begins. This is called the dynastic period, because from now on we find successive generations or families of kings, called, as in European history, dynasties, as numbered and enumerated by the Egyptian historian, Manetho, who wrote in the middle of the third century B. C. The chronology of these dynasties is in the greatest confusion, but it is probable that the accession of Menes and the beginning of the dynastic age falls not later than 3400 B. C., although it may possibly be a hundred years earlier. Beginning here, then, we look down the changing panorama of Egyptian history dur-
ing nearly 5,400 years to the present. Of this vast sweep of years, only the first 2,400 or 2,500 were under native Pharaohs, for since the middle of the tenth century B. C. Egypt has been under foreign kings, with but trifling exceptions. We see her then under her native kings, making the earliest chapter in human history, of which we are adequately informed. The first two dynasties of kings, living on the upper river, near Abydos, were masters of a civilization, from which we have, with slight exceptions, only material remains; but these are of such a character as to arouse the greatest admiration at the technical skill of these remote craftsmen on the one hand, and their fine sense of beauty on the other. But we cannot trace the political career of these earliest dynasties.

## The Old Kingdom

2980-2445 B. C.

With the accession of the 3rd Dynasty we are able to discern something of the political conditions, as we see Egypt rising into her first great period of power and prosperity, which we call the Old Kingdom. It includes Dynasties 3, 4,5 and 6, and lasted from the early decades of the thirtieth century to about 2400 B. C., nearly 600 years. It offers the oldest example of a developed civilization that is in any adequate measure known to us. Even granting that Mesopotamian culture is older, it presents for the period of the Old Kingdom, only an isolated date or two with here and there a royal name. But to the existence of the kings of the Old Kingdom, their pyramids still bear vivid witness; and often, too, these royal tombs are surrounded by a silent city of mastabas (masonry tombs), the walls of whose chapels acquaint us not merely with the names, but in graphic bas-relief also with the occupations, pastimes and daily life of whole generations of grandees, who formed the court of the Pharaoh in life, and in death now sleep beside him. Hewn in granite, limestone or diorite, their faces are familiar to us, and even the flesh and blood features of one of
these antique Pharaohs of the Old Kingdom have survived to look into our faces across nearly fifty centuries.

In order to view the career of the kings of this period, we must station ourselves at the southern apex of the Delta, on the western side of the river, where the ruins of Memphis lie, for their royal residence was always in or near this city (Map 3). Here we might have seen the Pharaoh ruling in absolute power, sending his officials from end to end of his kingdom, and dominating a functionary-state, the officials of which lived at court directly under the monarch's eyes. It was therefore a closely centralized state, the power of which was focused in the person of the Pharaoh. Had we walked the streets of Memphis we would have found three classes of people at least: at the top and bottom, the noble and official, governing class, and the serf; but it is impossible to think that the magnificent works of the Old Kingdom in art and mechanics, many of which were never later surpassed, could have been produced without a class of free craftsmen. There was, therefore, a free middle class of artisans and tradesmen. Art in sculpture, and the crafts attained a marvelous perfection; literature flourished; and in religion appear traces of an ethical test applied to every one.

It is far easier to draw a picture of the life of the Old Kingdom than to trace its history. Purely monumental materials are often eloquent witnesses of power and splendor, but give us little of that succession of conditions and events which forms history. Imagine an attempt to trace the history of Greece solely from its surviving monuments; much of the temper of the Greek people may have found expression there, but little of the course of events which marked their political history, and still less of the gradual mental unfolding, by which a people of rare intellectual powers developed with unparalleled rapidity, from childish myths to the profoundest philosophy. So in the 4th Dynasty, its rapid rise is evident from the enormous size of the Gizeh pyramids, but of the other deeds of their
builders we know little. Already in the 1st Dynasty, the Pharaohs had begun mining operations among the copper veins in the Peninsula of Sinai, and left their monuments of victory there. Snofru, the last king of the 3rd Dynasty, continued these enterprises, and sent fleets on the Mediterranean as far north as the slopes of Lebanon, where they procured cedar for Snofru's buildings. After three-quarters of a century of everincreasing power and splendor, the 3rd Dynasty was then succeeded by another family, the builders of the great pyramids of Gizeh, the 4th Dynasty. The possibly three centuries or more during which the 4th and 5th Dynasties ruled, clearly show a steady decline in power after the first century, if the decreasing size of the pyramids is any criterion; until in the 6th Dynasty, it is evident that the central power is slowly disintegrating. The Pharaoh's governors in the local administrative districts had gradually gained hereditary hold upon their offices and the districts they govcrned. They thus developed into a class of powerful landed lords and princes. They no longer build their tombs alongside that of the Pharaoh, but are buried on their own ancestral estates, where they have doubtless resided rather than at court as before. They were gradually drawing away from the king, who was unable to prevent them from attaining a greater degree of independence.

A court favorite of the time, named Una, has left us in his biography, an account of how he led a body of troops into the Peninsula of Sinai, where he five times routed the Beduin enemy. After this he brought his army by sea, on an expedition, as he says, "north of the land of the sand-dwellers," that is, the Beduin of Sinai. North of them means toward if not into Palestine, as he speaks of reaching certain "highlands," which may be those of Judea; but few details further than the defeat of the enemy are given. Already at this remote age, the noblemen of the Pharaoh carried on for him traffic with the east African coast, near the mouth of the Red Sea, the region which we now call the Somali coast (Map 2). These are the earliest
voyages in the open sea known in history. On the southern frontier similar officials carried on caravan trade with the Sudan, and subdued the warlike Nubian tribes in order to keep open the southern trade-routes. We shall visit the tombs of these aggressive nobles at the first cataract. There are also evidences of trade with the Aegean islands in the Old Kingdom.

Having ruled some 150 years, the 6 th Dynasty sank gradually into obscurity ; with it fell the Old Kingdom, leaving as its witnesses the irregular line of pyramids, which stretch from Abu Roash, opposite the southern apex of the Delta, southward for sixteen miles along the margin of the desert to Sakkara, beside the ruins of ancient Memphis (Map 5).

With the overthrow of the Old Kingdom we see the seat of power gradually moving up the river from Memphis. The local barons, who have now gained their independence, are contending among themselves for the crown. Of the 7th and 8th Dynasties we know nothing, but we shall see, in our voyage up the river, the tombs of the nobles of Assiut, the vassals of the 9 th and 10 th Dynasty kings who ended Memphite supremacy and lived at Heracleopolis (Maps 6 and 3).

## The Middle Kingdom

$$
2160-1788 \text { B. C. }
$$

The Heracleopolitans were unable to maintain themselves against the nobles of the south, especially the princes of Thebes, a city which, at this point, for the first time appears among the contestants, in so far as we know. You will find it at an important strategic point upon the river, not far above the bend, where it approaches most closely to the Red Sea (south of its northern arm, known as the Gulf of Suez:-see Map 3). Thebes from now on plays a prominent part in the history of the country; for a Theban family of nobles succeeds in pushing down the river, overthrowing the Heracleopolitans, and setting up a new dynasty, the 11th. This begins Egypt's second great period of power, which we will call the Middle Kingdom. As
the 11th Dynasty was succeeded by the 12 th, also of Theban origin, the power of Thebes was firmly established over the whole country, and thus about 2000 B. C. the country entered upon two centuries of unexampled prosperity and splendor. The organization of the new government was essentially that of a feudal state, a fact which shows that during the obscure period that preceded, the nobles have won a large degree of independence, the beginnings of which we have already seen in the 6th Dynasty. Social conditions have not materially changed since the Old Kingdom.

In order better to govern their new kingdom, the powerful monarchs of the 12 th Dynasty, the Theban Amenemhets and the Sesostrises, moved down the river to a point not far from the pyramids of the Old Kingdom, probably just above Memphis, and there they ruled with a sagacity and firmness that kept their family on the throne for over two hundred years. This is the classic period of Egyptian history; the system of writing for the first time attains a consistent and fixed orthography and literature flourishes as never before. The arts continued to develop with unprecedented splendor, medicine and elementary science made great progress; in religion, the ethical element had now triumphed, and the ethical quality of a man's life determined his destiny hereafter. The resources of the country were developed and utilized as at no time before. The kings executed enormous hydraulic works for recovering a portion of the flooded Fayum, a large oasis on the west of the Nile valley, so close to it that at some probably prehistoric period it was flooded from the inundation by the river (Map 5), forming the Lake Moeris of Greek times. Near the same place Amenemhet III built the vast structure known in classic days as the labyrinth. Abroad, Sesostris III followed up the campaigns of his ancestors in Nubia so successfully that he conquered all the territory above the first cataract as far as the second (Maps 2 and 3), and made his permanent frontier at a point above the second cataract, where he established several strong fortresses
to maintain it, thus adding 200 miles of Nile valley to the kingdom of Egypt. This province he then connected with Egypt by a canal at the first cataract. Trade with the southern Red Sea countries was still maintained. We hear even of a campaign in Syria, though its results were evidently not lasting. Traffic with the Aegean islands was not uncommon. Thus the Middle Kingdom, the feudal age of Egypt, shows itself more aggressive both at home and abroad than the Old Kingdom, the age of the pyramid builders.

The 12 th Dynasty kings have also left us their pyramids extending in a straggling line from Dashur, just south of Sakkara, to Illahun, in the mouth of the Fayum (Map 6). Of their temples, next to nothing has survived, owing to the complete rebuilding under the Empire. Under their successors of the 13th Dynasty, the power of the Pharaohs is again on the decline, resulting finally in the second period of uncertainty, like that which followed the Old Kingdom. Passing over the obscurities of the period, all that we certainly know is, that for a few generations before its close, we find the country in the power of foreigners, usually called the Hyksos (after Josephus), who took possession of the Delta and the valley for an uncertain distance up the river. They came from the north-that is, Asia-and were probably Semites.

## The Empire

$$
1580-1150 \text { B. C. }
$$

Against these usurpers, the Theban princes, the successors of the Middle Kingdom Pharaohs, finally waged a war of independence, which was brought to a successful issue by Ahmosis, the founder and first king of the 18th Dynasty. He drove the enemy from their stronghold, Avaris in the Delta, whence they fled to Palestine, and there Ahmosis besieged them for six years in the southern Palestinian city of Sharuhen, mentioned also in the Old Testament (Joshua xix, 6). After he had expelled them and pursued them to Phœenicia, he returned to Egypt to wield
a power, up to that time unknown to any Pharaol. For in the war for liberty and long-continued internecine conflicts the local barons have been practically exterminated, and thus about 1580 B. C. Egypt begins her third period of power, which we may call the Empire, with a totally different organization from any that we have thus far found. It is now a military state, largely made so by the wars with the Hyksos, who taught the Egyptians warfare and for the first time introduced the horse into the Nile valley. What few nobles have survived are no longer local proprietors, but simply hold rank in the Pharaoln's service ; the Pharaoh personally owns the land. For the first time there is a great standing army, into which we see Egyptian gentlemen entering as professional soldiers, and from now on the soldier is the most prominent figure in political life. Side by side with him, and for the first time also a power in the state, now stands the priest. Soldier and priest, therefore, replace the barons of the Middle and the functionaries of the Old Kingdom.

From Thebes, now just beginning its career of splendor, the great military monarchs of the 18 th Dynasty went forth to cross the isthmus of Suez and conquer Palestine and Syria, or to pass up the river into Nubia and push the frontier of Egypt to a point above the fourth cataract of the Nile (Map 3), the extreme southern limit of Pharaonic conquest. The grandson of Ahmosis, Thutmosis I, whose obelisk we shall see at Thebes, carried Egyptian power to the upper Euphrates (Maps 1 and 2), but was unable to organize his conquests into Egyptian dependencies. The succession of his daughter, Hatshepsut, interrupted the course of foreign conquest, for this remarkable queen was not given to war, and neglected the empire abroad. She devoted herself to the peaceful development of her empire. Her greatest feat was an expedition to the Somali coast, on a much larger scale than anything formerly known, and, when we have visited Thebes, we will see her expedition trafficking with the natives of distant Punt, as the Egyptians called the Somali coast. Meantime the Asiatic con-
quests fall away. Finally, after much confusion in the succession to the crown, Thutmosis III, the brother of the talented queen, succeeds in maneuvering his sister out of the throne. He immediately began the recovery of the conquests in Asia. In no less than seventeen great campaigns he subdued all Palestine and Syria; he planted a tablet of victory alongside that of his father on the banks of the Euphrates, he organized the conquered lands into dependencies of Egypt, built forts, planted garrisons, appointed governors, or allowed former princes to rule as vassals of Egypt; and when he died, after a reign of fifty-four years, he was regularly receiving tribute from the uttermost parts of a vast realm, the first organized empire known in history, extending from the upper waters of the Euphrates to the fourth cataract of the Nile. All that honor, which, following current tradition, we have customarily accorded Ramses II, belongs to Thutmosis III as the greatest military genius of earlier Oriental history.

This position of power and splendor, the influx of untold wealth, the sudden and intimate commingling with the life and culture of Asiatic peoples, reacted powerfully upon Egypt, as well in political as in social and industrial life, producing after the reign of Thutmosis III the most profound and far-reaching changes. Before the 18 th Dynasty, social conditions were not radically different from those of the Middle Kingdom, so that there is more of change in this particular, in and immediately following his reign, than during the entire interim from the Middle Kingdom to the Empire. Among many of these changes, we notice the vast influx of foreign captives, taken especially in the Asiatic wars. They were utilized particularly on the Pharaoh's buildings, in just such a manner as the Hebrews were employed, or in medirval days, the captives from the ranks of the crusaders forced by Saladin to build the walls of his citadel at Cairo. It was their labor, though not their skill, which built the mighty temples which we shall find up the river, especially at Thebes. In general, all those changes, which affect
a people of simple habits, when suddenly raised to a position of great power, are now observable. Asiatic princesses from Babylonia and the upper Euphrates for three traceable generations and probably longer, are given in marriage to the Pharaoh by their royal fathers. In the industrial and æsthetic arts, in language, in costume, in religion, in pastimes, in war, Egypt is now strongly tinctured by Semitic Asia. Even far off Mycenæ, too, is present in pottery and metal work, and traffic with the whole northern world is constant and far-reaching.

Under the two immediate successors of Thutmosis III, his vast conquests in Asia were maintained with vigilance, followed by some relaxation under Amenophis III, his great-grandson. The thinking men of the time now began unconsciously to feel the widening of the horizon, which Egypt had experienced in the last hundred and fifty years. Most of their gods had once been local divinities, worshiped only in restricted districts, but they now began to extend the jurisdiction of the great state god Re to the limits of the Egyptian empire. In other words, political conditions were gradually leading them to a practical if not to a philosophical monotheism. Amenophis IV, the son of Amenophis III, provoked by the rising power of the old Theban god Amon, with whose priesthood he was politically at loggerheads, inaugurated a far-reaching revolution, in the course of which he attempted to introduce the exclusive worship of Re , the sun-god, throughout his realm. For this purpose he established several new cities, one in Egypt, one in Nubia, and possibly one in Palestine, each devoted to the sole worship of his sun-god under the name "Aton," which is an old Egyptian word, meaning "sun-disk" The new city in Egypt was located at Tell el-Amarna (Map 3 ), about 320 miles below Thebes; and, forsaking Thebes, the king made it his royal residence and capital, at the same time changing his own name from Amenophis, which contained the name of the hated Amon, to Ikhnaton, which means "Brightness (or possibly Spirit) of the Sun-Disk."

The beliefs of the new faith, developed by Amenophis IV, are remarkable. The surviving hymns, containing all that we know of it, express adoration of one god, ruling all the world of which the Egyptian knew. They delight in reiterated examples of his creative power, as seen in plants, animals, men, or the great world itself, and then of his benevolent sustenance of all that he has created. But they are not ethical ; they contain no hint that the recognition of a great benevolent purpose carries with it morality and righteousness in the character of god, or the demand for these in the character of men. Nevertheless, the entire movement was far in advance of the age. After a reign of seventeen years Ikhnaton died, leaving no son; with him perished the remarkable movement, which solely by his own personal power he had sustained against the tremendous inertia of immemorial custom and tradition. The Amonite priests wreaked vengeance upon the body, the tomb, the temple and the city of the hated idealist, and reestablished the traditional religion.

The Amarna letters, a series of long-continued correspondence found in the ruins of Ikhnaton's new city of Tell el-Amarna, a correspondence maintained between the Pharaohs and their vassal kinglets in Syria and Palestine, besides also a series of letters between the kings of the Tigro-Euphrates valley and the Pha-raohs-all this affords us a vivid picture of the provincial administration of this period, and of the plotting and counterplotting of the petty, semi-independent Palestinian and Syrian rulers, each striving to gain the support of the home government against his fellows. Here we find Machiavellian politics already ripened to a degree of cynical perfection, which we should never have anticipated. But the far-reaching disturbances accompanying the revolution of Ikhnaton weakened the foreign administration to such an extent that all the Asiatic states revolted. The revolt was complicated by the advance of the Hittites from eastern Asia Minor into Syria, and the invasion of Palestine and Syria by Beduin hordes in one of their periodic overflows
from the eastern deserts. With this latter movement began the Hebrew occupation of Palestine, and among the Beduin, whose invasion of Palestine is revealed in the Amarna letters at this time, we must recognize the Hebrews. The royal house could not withstand the shock and the 18 th Dynasty fell about 1350 B. C., having enjoyed two hundred and thirty years of unprecedented power and splendor.

With the rise of the 19 th Dynasty, about 1350 B. C., new conditions confronted the Pharaohs in Asia. The Hittites, foemen fully equal to the contest with Egypt for the possession of her former Asiatic conquests, had meantime, as we have seen, pressed into Syria from Asia Minor, and, advancing southward, before the close of the 18th Dynasty, had occupied the country as far south as the Lebanons. Thus Sethos I, whose face we shall yet look upon, after receiving the ready submission of Palestine, was able to advance no further than a little north of Carmel, thus gaining the southern coast of Phoenicia. His son, Ramses II, after continuous war for over seventeen years, failed to break the power of the stubborn Hittites, or to wrench from them the northern conquests of Thutmosis III. He therefore concluded a peace with them on equal terms, having permanently advanced his northern boundaries very little beyond those of his father, Sethos I. One of his famous battles in this war at the city of Kadesh nearly cost him his life, and he was fond of having his valiant defence on that occasion depicted in splendid reliefs in his great temples. These we shall later see at Thebes. Egypt's territory in Asia is now essentially within the limits of later Palestine, with the addition of the Phœenician coast cities as far north as Beirut (Berytus, Map 2). The enormously long reign of Ramses II (sixty-seven years) and the astonishing number of his great buildings made him the ideal Pharaoh in the eyes of later generations, and even modern scholars have falsely identified him with Sesostris, the legendary hero of Egypt in Greek tradition, about whom clustered all the great deeds of Egypt's
kings of every age. But all the Sesostrises belong in the Middle Kingdom.

Under the successors of Ramses II, the Empire, hard beset by Libyan invasion, again sank into weakness and confusion. Among the Semitic captives who, in great numbers, have been brought into the country since the days of Thutmosis III, the Hebrews must have been toiling on the royal buildings of this age, as narrated in the Old Testament. They dwelt in the land of Goshen, in the eastern Delta, which we shall later visit. In the Cairo Museum we shall see the only monument referring to Israel by name. The scanty evidence would indicate that their escape from Egypt occurred in the decline which followed the death of Ramses II, but there is no monumental reference to their flight. On their escape they were able to join kindred tribes who had been gradually occupying Palestine since the decline of the 18 th Dynasty. (See above.)

With the accession of the 20th Dynasty, about 1200 B. C., the country is so visibly on the decline, that the rise of this or that family into power is but an incident in her decay. The advent of the 20th Dynasty under Ramses III was therefore but a deceptive rally. This king, who in every way imitated Ramses II, succeeded in turning back the tide of Libyan invasion, already serious at the close of the 19 th Dynasty. He was notably successful in maintaining his Asiatic frontier at essentially the same limits as those of Ramses II, and this, against an inpouring horde of invaders from the north, who advanced southward by sea and land, devastating Syria as they went. We shall see at Thebes, on the wall of one of his temples, the naval battle which he fought with them. But his is an empty prosperity; affairs at home are in the worst possible condition. The native forces of the Egyptian people are exhausted; their military enthusiasm is forever quenched. From the fall of the 19th Dynasty, the internal history of Egypt is but the story of the overthrow of the Pharaohs and the usurpation of the throne,
first by the priests of Amon, and then by foreign mercenaries from the ranks of the Libyans, who now largely make up the army. The offices of the priest and the soldier, the strength of the state in the early Empire, are now perverted to the destruction of the ancient nation.

## The Decadence

$$
1150-663 \mathrm{B.} . \mathrm{C} .
$$

Shortly after the death of Ramses III the Asiatic empire finally collapsed, and the long Decadence ensued. Ramses XII, the ninth of the feeble Ramessids, who, one after another, followed Ramses III, was unable to transmit the crown to his son, or was quietly set aside by Hir-Hor, the high priest of Amon at Thebes. The priests did not long succeed in retaining the royal honors, for the Ramessids, who, from Ramses II's day, had lived in the Delta, set up a dynasty in his splendid Delta city of Tanis. They forced the Amonite priests from the throne and reconciled the priestly party by themselves assuming the high priesthood of Amon, and intermarrying with the women of the old priestly house. They form the 21st Dynasty. The overthrow of the Ramessids of the 20th Dynasty could hardly have occurred much later than $1100 \mathrm{~B} . \mathrm{C}$. It brought the seat of power finally to the Delta, already since Ramses II's day the royal residence, and thus the decline of Thebes began. It also lost Palestine to Egypt and permitted the rise of the Israelitish monarchy during the eleventh and tenth centuries, in a region, which, for about five hundred years had been an Egyptian province. The great building period which began with the 18th Dynasty at Thebes, was now ended, and the vast temples which we shall find there grew up under the Empire, particularly the 18th and 19th Dynasties.

From very early times the Egyptians, naturally unwarlike, had received Libyan mercenaries among their troops. From the rise of the 19th Dynasty onward, the native forces were more and more inclined to relinquish the sword to these foreigners, who increased in
numbers with every subsequent reign. The victories of Ramses III were for the most part due to them. About 950 B. C., when the power of the native Pharaohs was at its lowest ebb, these powerful military adventurers thrust aside the feeble 21st Dynasty and assumed the kingship, forming the 22 nd Dynasty. Thus, after some two thousand five hundred years of native rule, the spent and impoverished nation passed under foreign masters, and with trifling exceptions she has had nothing else since. From this time on, there was "no more a prince out of the land of Egypt."

## The Libyan Period

$$
950-663 \mathrm{B.C.}
$$

The first ruler of the new family, Sheshonk (Biblical Shishak), early planned for the recovery of the ancient province of Palestine. Hence it was that he received Jeroboam so willingly and seized the opportunity of a division among the Hebrews (with which it is not impossible that he had something to do), to reconquer Palestine and plunder Jerusalem (I Kings xiv, $25-26$ ). The attempted reconquest, apparently little more than a plundering expedition, was not enduring, but Sheshonk had a record of it engraved on the wall of the Karnak temple at Thebes, where we shall study it. But the power of Sheshonk's successors in Bubastis, the Osorkons, the Sheshonks, and the Takelots, rapidly declined, while in the Delta and up the valley there was, within a hundred years of the first Sheshonk's death, a similar kinglet in almost every important city. Hence it was that Egypt was unable to do anything to check the rapidly rising power of Assyria, which was now threatening Palestine. Of these Bubastite or 22 nd Dynasty kings after Sheshonk I, we know almost nothing, so few monuments have been left us, and so complete is the destruction of the Delta cities,

## The Nublan Period

## 775-663 B. C.

While the weakling princes of the Delta were doing all in their power to check Assyria's westward progress, a new complication arose in the Nile valley itself. Probably as early as the 21st Dynasty the Nubians had gained their independence and there grew up an independent Cushite kingdom on the upper river, with its capital at Napata, just below the fourth cataract (Maps 2 and 3). Here, then, with an ever deepening tinge of barbarism, we find developing a repetition of the Theban state, with Amon at its head. These Egyptianized Ethiopians soon pushed northward and gained control of Thebes, whose priesthood had perhaps founded the new kingdom at Napata. By 732 B. C. they were ready for greater things, and the conquest of all Egypt, with the exception of some of the more stubborn Delta cities, was successfully achieved by their first great king, Piankhi. It was, however, but temporary, and for a hundred years after the invasion the history of Egypt is made up on the one hand of attempts of the local kinglets on the lower river at overthrowing each other, and on the other of invasions of the Ethiopians, who found it only too easy to subdue and plunder a nation so disorganized. This situation was further complicated by continual attempts against the advance of the Assyrians. But by 670 B. C., after futile efforts on the part of successive Ethiopian kings to halt Assyria, the dreaded invasion by that power comes, and Memphis is plundered. Tanutamon, the last of the Ethiopians to renew the attempt to hold Egypt, again came down the river as far as Memphis in 663 B. C., and thus provoked another invasion of the Assyrians under Ashurbanipal. The latter advanced a forty days' march up the river to Thebes, which he sacked and wasted, a ruin from which the great capital of the monarchs of the Empire never wholly recovered. Neither Tanutamon nor his successors ever again ventured into Egypt; the Ethiopian domination in Egypt had thus lasted, with some
interruptions, from 732 to 663 B. C. Having transferred the capital from Napata to Meroe (Map 3) far up toward the junction of the two Niles, the Ethiopian kingdom endured down into the first Christian centuries.

## The Restoration

$$
663-525 B . C .
$$

The strife of the local dynasts and petty kings, which now broke out anew, might have continued indefinitely had not a new element been suddenly introduced. Psamtik (Greek Psammetichos), a Delta prince of Sais, following the traditions of his family, was enabled to gain the lead by the employment of mercenaries from a new source ; these were Greeks and Carians. By this means he rapidly subdued his neighbors, threw off the yoke of Assyria, and by 645 B . C. had gained the whole valley as far as the first cataract, in addition to the Delta. Assyria, now nearing her fall, was unable to prevent the consolidation of his power. Thus, after centuries of unparalleled confusion and disunion, Egypt was finally granted peace and stable government, and Psamtik ushered in a new day. His family we call the 26th Dynasty. Egypt now prospered as never before, and in Greek and Phoenician bottoms, her products were carried to every mart of the known world. Now began the establishment of her naval power, which made her so formidable under the Ptolemies. The Greeks now entered the country in large numbers, and were allowed to found in the western Delta their great trading city of Naukratis. This period was in every sense a restoration; perhaps not of the glory of the Empire, but in intention at least, a restoration of the Old Kingdom, which had created such enduring witnesses of its power, and seen through the perspective of twenty centuries, seemed to the Saites an ideal age. Although the hopes of Psamtik's Dynasty, for the recovery of Syria and Palestine, naturally excited by the fall of Assyria, were thwarted by
the unexpected rise of Babylonia under Nebuchadrezzar, nevertheless the family ruled in great power and prosperity for 138 years from the accession of its founder. But new forces are at work, the old oriental world is being gradually broken up and transformed, Egyptian and Semitic dominance is at an end, and the western world is soon to touch the east with a mighty hand, involving it forever in the destinies of the great nations of Europe. But first came the rise and dominance of Persia.

## The Persian Period

525-338 B. C.

In 525 B. C. Cambyses defeated Psamtik III, the last representative of the 26th Dynasty, at Pelusium, in the eastern Delta. By moderation and justice, the Persian kings came to be recognized as the successors of the old Pharaohs of Egypt, and, with some interruptions, they ruled the country from Cambyses's victory until 338 B. C., almost 200 years. They are called the 27 th Dynasty, and the native princes of the Delta cities, who rebelled against them from time to time, succeeded in setting up the ephemeral 28th, 29th and 30 th Dynasties, all of which fall within the period of Persian rule. Of these last dynasties, only one king, Nektanebos, succeeded in gaining any great power or the sovereignty of the whole country. This king, under whom a faint revival of the old glory flickered fitfully for a few years, built the beautiful temple of Philæ. which we shall visit.

## The Greek Period

332-30 B. C.

With the overthrow of the Persians by Alexander the Great, Egypt was incorporated into his vast kingdom without resistance in $332 \mathrm{~B} . \mathrm{C}$. He founded Alexandria in the same year, and it soon became the centre of Mediterranean commerce. On the division
of his kingdom, Egypt fell to Ptolemy, one of Alexander's generals, who gradually assumed royal prerogatives and became Ptolemy I, the founder of the Ptolemaic Dynasty. The family at times developed great power and ruled the old Asiatic dominions of Egypt as far as the upper Euphrates. Ptolemy I founded in Alexandria the Museum, containing a great library and commanding liberal endowments for the support of scholars and men of literature and science. Such patronage was continued by his successors, and Alexandria thus became the greatest seat of learning in antiquity. But his later descendants were often guilty of the grossest misgovernment, cruelty, and neglect, under which the country gradually declined. But they were all regarded as the legitimate successors of the old Pharaohs; they respected the old religion and built splendid temples, of which we shall find impressive examples when we ascend the Nile in our tour of the country. Finally, as Rome rose, she mingled more and more freely in the affairs of the Ptolemies, until, after the romantic career and tragic death of Cleopatra, the last of the Ptolemaic line, Egypt became a Roman province in $30 \mathrm{~B} . \mathrm{C}$.

## The Roman Period

## 30 B. C. -640 A. D.

The Roman emperors were now regarded as the Pharaohs of the land, which they ruled by means of governors, called prefects. Egypt, the once powerful nation, settled down into much the same condition in which she now is. The fertile valley became the granary of Europe, and the recognized source of paper, made from papyrus reeds, which it had begun to export as early as 1100 B. C. ; but the spirit of the old arts, and the mighty architecture had fallen forever asleep. The land was now visited by wealthy Greek and Roman tourists, who ascended the river and admired its marvels, as Cook's thousands do at the present day.

Christianity spread rapidly, in spite of frequent persecution by the Roman emperors, until, under Theodosius I (379-395 A. D.), the magnificent temples of the Pharaohs were forever closed. The conflicts among the Christians themselves on questions of doctrine, and the vast number of ascetics in the innumerable monasteries, involved Alexandria in constant broils, which, with the persecution of the Jews, her best merchants, made the continuance of her commercial supremacy impossible. With the partition of the Roman Empire in 395 A. D., Egypt became a portion of the Eastern or Byzantine dominion, with its capital at Constantinople. Declining steadily in power and initiative, the Egypt of this period has left very few monuments, and we shall find little to remind us of it as we pass through the country.

## The Moslem Period

$$
640-1517 \mathrm{~A} . D .
$$

Eight years after the death of Mohammed, which occurred in 632 A. D., Amr ibn el- As, the general of the second caliph, 'Omar, marched against the now entirely Christianized Egypt, and made complete conquest of the country. The caliphs governed it with justice and discretion by means of governors, but as the caliphate declined and the caliphs of Bagdad became mere puppets in the hands of their governors and generals, the governors of Egypt made themselves independent rulers of the country, and the first dynasty of such independent monarchs was founded by Ibn Tulûn, in 868 A . D. We shall later see his mosque, which is the oldest building in Cairo. Under the Fatimids, who ruled from 969 to 1171 A. D., Cairo was founded ( 969 A. D.), and rapidly grew to be an important city in the Moslem world. With the overthrow of the Fatimids by the famous Saladin, a Turk, in 1171 A. D., Egypt again ruled Syria to the upper waters of the Euphrates. But Saladin introduced as his trained body-guard a multitude of white slaves, who are called Mamlukes in Arabic. Rewarded with lands
by the Sultan and forced to render him a certain quota of troops each year, these white slaves soon became a body of rich and powerful feudal nobles, who made sultans as often as they pleased, and no sooner had one of their number succeeded in gaining the coveted crown, than he was assassinated or displaced by another, unless he was a man of unusual strength and initiative. They overthrew the Eyyubid Dynasty (as that of Saladin is called) in 1240 A. D., and they ruled the country until 1517. Some of them were strong and able men, who did much for the country and greatly encouraged art and letters. Under them in the fourteenth century Cairo became what we shall find it, and its most beautiful mosques were the work of these rulers. Christianity, though often tolerated and sometimes treated with great liberality, was also severely persecuted. Islam had long since gained a large majority of the population, and the Christians, now called Copts, gradually diminished in numbers under persecution. The old language of the Pharaohs, which had been slowly yielding to the Arabic for centuries, now gave way entirely and was spoken only in a few remote villages, as in modern times the ancient Keltic language of Ireland is spoken. It had long ceased to be written, either in hieroglyphic, or its cursive forms, hieratic and demotic, but for a thousand years the Egyptians had employed Greek letters in the writing of their ancient language, as we employ Roman letters in writing English. In the translations of the Bible and in the church ritual, this form, written with Greek letters and called Coptic, continued to be used; but by the close of the Mamluke domination the old language of the monuments vanished completely as a spoken tongue, and Arabic became the language of Egypt. But Coptic is still used in reading the church service, and in the Coptic churches you may still hear the language of the monuments ; but the listening congregation does not understand it any more than a Roman Catholic congregation in Italy understands the service of their church in Latin, though that tongue was once the common language of the country.

## The Turkish Period

## 1517 to the Present

In 1517 the Mamlukes were defeated by the Turks, and although they long continued powerful in Egyptian politics, Egypt became a province of Turkey, and a victim of the misrule to which all Turkish provinces are so often subject. The Turkish Sultan's grasp upon the country was often so loose, that his authority was merely nominal, and after the ephemeral French occupation under Napoleon (1798-1801), terminated by the British, a young and obscure Roumelian named Mohammed Ali, a colonel in the Albanian division of the Turkish army, succeeded in gaining the upper hand and founding a new dynasty in Egypt, which is still on the throne. In 1811 he exterminated the Mamlukes; and but for the interference of Europe after he had gained possession of Syria he might have overthrown the Sultan, whose European territory he was preparing to invade. His family has since secured from the Sultan the title of Khedive, or viceroy, which is now hereditary in the dynasty. Financial extravagance and hostility to European influence finally forced the English and French to interfere, and in 1881, the French having withdrawn, the English bombarded Alexandria, and, landing, defeated the Egyptian leader Arabi Pacha at Tell el-Kebir. Since then Egypt has been under British influence to such an extent that it amounts to a British protectorate. English rule, however, received a rude setback in the Sudan rebellion. The country on the upper Nile, to a frontier some distance above the two Niles, had been gained for Egypt by Mohammed Ali and his descendants; but in 1883 a religious enthusiast named Mohammed Ahmed, who called himself Mahdi ("the Guided"), succeeded in stirring up a widespread rebellion, in opposing which, the great Englishman, General Gordon, perished. The whole Sudan was lost to Egypt, and the southern frontier was at Wadi Halfa by the second cataract, until Sir (now Lord) Herbert Kitchener, after completing the railroad across the desert from Wadi Halfa
to Abu Hammed, defeated the Mahdist forces in 1898, and recovered the Sudan. British rule has been an unquestionable blessing for Egypt, and the country is now enjoying a prosperity, and financial stability which it has never before possessed.

Look back for one moment through this long line of foreign conquerors, who have entered Egypt since the glory of the first great empire under the 18th and 19th Dynasties faded and disappeared. One after another they have entered and marched across the Delta for 3,000 years; Libyans, Nubians, Assyrians, Persians, Greeks, Romans, Arabs, Turks, French and English. Of all these we shall find some remains as we journey through the country, and in no other land can we find a succession of kings and dynasties or a series of monuments embracing such a wide span of centuries as in the Nile valley.

A chronological table will enable you to follow the whole period of Egyptian history with greater clearness.

## CHRONOLOGICAL TABLE

## The Predynastic Kingdoms

Year
B. C.
4241. Introduction of the Calendar.

The Earliest Dynasties (1 and 2); Supremacy of Thinis
3400. Beginning of the dynasties under Menes.

The Old Kingdom (Dynasties 3-6); Supremacy of Memphis
2980. Beginning of the Old Kingdom, with the rise of the 3rd Dynasty.
2445. Fall of the Old Kingdom.

Middle Kingdom (Dynasties 11-13); Supremacy of Thebes
2160. Rise of the Middle Kingdom, with the beginning of the 11th Dynasty.
2000. Accession of the 12 th Dynasty, the great dynasty of the Middle Kingdom.
1788. Close of the 12 th Dynasty, bringing in the decline of the Middle Kingdom, followed by the Hyksos domination.

The Empire (Dynasties 18-20); Supremacy of Thebes 1580. Rise of the 18 th Dynasty, expulsion of the Hyksos and beginning of the Empire.
1350. Close of the 18 th Dynasty and loss of Asiatic conquests.
1350. Rise of the 19 th Dynasty, followed by recovery of Palestine and war with the Hittites; Sethos I, Ramses II.

## Year

B. C.
1205. Fall of the 19th Dynasty, and after an interval the accession of the 20th; Ramses III.

## The Decadence (Dynasties 20-25)

1150. Final loss of Asiatic conquests; beginning of the decadence.
1151. Usurpation of the priest-kings at Thebes, and succession of the 21st Dynasty in the Delta.
1152. Fall of the 21st Dynasty, and accession of the Libyans as the 22nd Dynasty.
1153. Invasion of the Nubians and Nubian domination, continued with interruptions during the 23 rd and 24th dynasties of Delta princes; the Nubians themselves being the 25th Dynasty. 670. First Assyrian invasion under Esarhaddon.
1154. Last Assyrian invasion under Ashurbanipal and overthrow of the Nubians.

## The Restoration (26th Dynasty)

663. Accession of the 26th Dynasty, and beginning of the Restoration.
664. Fall of the 26th Dynasty and close of the
Restoration period. The Persian Period (27th Dynasty)
665. Accession of Cambyses after the battle of Pelusium.
404 to 343 . Native Dynasties ( 28,29 and 30 ) striving to expel the Persians.
666. Alexander the Great entered and seized Egypt.

The Greek Period, or Dynasty of the Ptolemies
332. Foundation of Alexandria.
323. Death of Alexander the Great, and accession of Ptolemy I as Satrap.
30. Death of Cleopatra and close of Ptolemaic rule.

## The Roman Period

30. The first Roman prefect, Cornelius Gallus, enters Egypt.
A. D.
31. Accession of Constantine; the first Christian Emperor.
32. Accession of Theodosius I, who declared Christianity the religion of the empire and closed the temples of the old religions.
33. Partition of the Roman empire and accession of the Byzantine emperors at Constantinople.

## The Moslem or Mohammedan Period

640. Conquest of Egypt by the Moslems ; first Moslem governor.
641. Accession of the Tulunids, the first independent Moslem rulers of Egypt.
969-1171. The Fatimids.
1171-1250. The Eyyubids, or Dynasty of Saladin.
1240-1517. The Mamlukes.
1517 to the present. Turkish rule.
1798-1801. French occupation.
1805-1848. Mohammed Ali.
642. Battle of Tell el-Kebir and beginning of British control.
643. Rebellion of the Mahdi in the Sudan.
644. Death of Gordon and fall of Khartum.
645. Defeat of the Mahdists and recovery of the Sudan.
The monuments in the country so constantly illustrate its history that many important events and periods will be discussed as we stand before these monuments themselves. This method will render the great epochs of Egyptian history much clearer, and many of the greatest events are reserved for discussion in the presence of such contemporary monuments.

## THE ITINERARY

Together we are about to make the tour of a remarkable river valley, more thickly strewn with monuments of early civilization than is any land in all the world. We are not (actually) to enter the country in the body, but this will make no difference, if we can obtain the experiences, the states of consciousness, of being there. Such experiences are obtainable by the right use of the stereoscope, the stereographs and the accompanying maps. Though we do not actually walk from place to place, still we shall know what it means to stand in one hundred different places in the valley, and if you note carefully where we stand in each case, you will be making the tour of the country with very many, if not all, of the experiences which you would gain by an actual visit. We shall view what we are to see, particularly the monuments, in a number of different aspects.
First, Locality. We must in every case study the particular part of Egypt we are viewing in relation to its surroundings. With your eyes within the hood of the instrument (stereoscope) you must consider carefully the various relations of the prospect before you, the direction in which you are looking, what lies beyond a distant horizon, what is to the right, left, or
behind you. On the Nile we are especially blessed with important and always present elements of the geography, by means of which we shall be able to locate ourselves. We must always ask, where is the river? on which side of it are we? where are the eastern walls of the cañon? where are the western walls? where is the desert? for these things are practically always with us, as soon as we have passed from the Delta into the valley. Further, when a number of standpoints are in localities contiguous or partially identical, we must ask ourselves in every case as we look out over the new prospect, where did we stand in our last position? Even when the distance from the last position is many miles, if you think in what direction it now lies, you will be able to connect the one hundred points of view into a coherent whole, and into a definite progress through the land in a real and connected tour.

Second, History. Having considered place, we must turn to time, which really means history. In most cases the part of Egypt before us will contain some great monument marking an important historical event or period or a series of these. The main epochs of Egyptian history can be made so familiar to you in a short time, that you will be able to place every monument, not merely in its proper locality in the Nile valley, but be able to see it also in its great historical perspective. The conversation which we shall hold together at each place will be such, that when your memory fails you, the place of the monument will be suggested and recalled.

Third, Art. Many of the monuments upon which we shall look are vaiuable, and sometimes phenomenal works of art. Let us always think of their value and
meaning as such; let us not imagine that the form of the object before us has always existed as a matter of course, but let us remember that many of the things which we shall see, did not exist until they were conceived by the mind of the Egyptian, and thus a great contribution was made to later human culture, which has profited by the genius of the Egyptian.

Fourth, Mechanics. We shall find in the Nile valley some of the greatest mechanical achievements of man; and indeed the greatest in oriental antiquity. Let us always think of the mighty works which we are to see in this aspect also, realizing that many of the processes employed were first evolved and used by the Egyptians.

If we observe these precautions we shall finally come to see all these things as human documents, the offspring of the mind of ancient man, and frequently opening to us the possibilities of that mind, as a literary document could not do, however superior the literary documents in most cases may be. Doing this we shall not be making merely a local progress through the country, but we shall also follow the career of its people through the ages and gain a comprehensive conception of Egypt, not merely as a land and a place, but also as a great first chapter in the fascinating story of man.

But the first condition leading up to this mental conquest is to place ourselves at the point of view, to obtain a vivid sense of location in the northeastern part of Africa, with eyes in the hood of the instrument, forgetting that we are sitting in ar armchair in modern America, as we look out over prospect after prospect in the Nile valley. If you will but believe it, you will have experiences of looking through a window, from which all that might be seen on the
spot will appear in its proper dimensions. In my opinion there is no other means of obtaining impressions like those of standing on the actual spot, anywhere near as perfect as those to be obtained by the right use of the stereoscope and this map system. Above all, do not look at a place for a careless few seconds and throw it down in disappointment, but follow with me the points which we are to note together and find them in every case either in the scene or on a map; and when you have done this, then follow them all through again, noting each detail as you pass it. You will be surprised to find after you have done this, how much each section of the land has come to mean, what an intelligible story it tells and how much more there is in it than you supposed beforehand. If you do this for every one of the outlooks from the one hundred points of view, you will have become more familiar with Egypt than most tourists in that country, who usually read so rapidly on the spot and are hurried about at such a rate, that they bring home only blurred and confused impressions of what they have seen. Furthermore, wherever your memory later fails you, you have only to return to the spot by means of the stereoscope and renew your impression, which the tourist cannot do.

Finally, make constant and repeated use of all the maps; never take a position without having first found it on the map, if it is there at all (only two or three are not marked with red lines on the maps), and then compare it with the last point of view as to distance, direction, etc. Frequent references are made to the maps in the texts, but it has been impossible to refer to them in every line where they should be used. It is impossible to use them too much, and it will be found
very useful to have the map open before you on the table constantly, turning it around as you take each new position, so that you have the apex of the red $V$, marking out the direction and field of your vision, pointing toward you. You will then be looking across the map in the same direction in which you are looking, in that particular view in Egypt ; and right and left, in front and behind, as you find them mentioned in the book, will exactly correspond on the map; even though some of the print on the map may often be upside down.

Let us now open the large map (3), and trace the route which we are to follow through the country. We shall land at Alexandria, proceed by rail to Cairo, where we pass from the Delta into the cañon of the river. From Cairo, after a short study of the town and some of the important monuments in the museum, we shall visit the surrounding points of interest ; the pyramids, Memphis, Heliopolis with its solitary obelisk, the quarries from which the stone of the pyramids was taken, and the city of Pithom to the northeast, built by the Hebrews. Leaving Cairo and beginning the voyage of the river, we shall visit the Fayum, the great oasis on the west side of the river; and the south end of the line of pyramids. Then, passing these monuments of the Old and Middle Kingdom, we reach the tombs of Benihasan; then the tombs of Assiut, over two hundred miles above Cairo, with suggestions of the coming rise of Thebes; then entering the great Theban period, we visit our first temple at Abydos, and, after a brief visit at Dendera, we reach Thebes itself. Here we shall spend a long time, studying first the east and then the west side of the river, After
a visit at El-Kab and Edfu, fifty miles or so above Thebes, we shall reach the first cataract, where we shall visit Assuan, Elephantine, and beautiful Philæ. We then enter Nubia and shall stop at Kalabesheh and Kasr Ibrim on our way to Abu Simbel and its great cliff temple. We shall then have followed the Nile River from the mouth to the vicinity of the second cataract. Leaving the Nile at Wadi Halfa, we shall pass over the desert railway from there to Abu Hammed, cutting off the great bend of the river, on our way to Khartum, but shall make no stop until the last-named place is reached. We shall look at the tomb of the Mahdi, at Omdurman, opposite Khartum, and view the palace of the governor of the Sudan in Khartum itself. Here our voyage will end; or you can follow it back to the Mediterranean through the same places if you wish. You will find nearly all the places which we visit underlined with red on this map, and this will enable you to find the points without difficulty. If you notice any slight difference in spelling on the various maps, this is due to the fact that these names are all Arabic, and that it is therefore possible to put them into English in several different forms. As our maps are from different sources, and made by different men, uniformity was inpossible.

Turn now to Alexandria. There we are to stand and look north toward the Mediterranean.*

[^1]
## Position 1. Pompey's Pillar, the sailors' landmark, and modern Alexandria, north toward the ser

We have taken our stand out here on the south of the city in the quiet sunshine, where we are gradually to realize that we are actually in the land of the Pharaohs, and really about to visit the innumerable marvels of this land of many wonders. Over behind these houses is the sea across which we have come, for we are looking almost exactly northward. Yonder, then, to the northwest, is distant Europe (Map 1 ), and behind us is the fan-shaped Delta, gradually narrowing into the long valley or cañon of the Nile, which we are to traverse to the union of the two Niles, 1,500 miles south of this city. We stand then with the whole African continent behind us (Map 1), out of the heart of which the Nile issues, and we look toward Europe across this world-famous city, which was the chief instrument in uniting the civilization of the two continents. For it was the intention of Alexander the Great, when he founded this city in 332 B. C., to make it the link, which by commercial and other activities should weld Egypt into the great Greek world-empire which he planned. His conquest of Egypt and his foundation of this city marked a new epoch for Egypt, and drew her forever into the turmoils of European history, which she had hitherto escaped.

Under the Greek Dynasty founded by Alexander's general, Ptolemy, son of Lagus, and from him called the Ptolemaic Dynasty, this city rose rapidly till it became not merely the most powerful commercial centre, but also the greatest seat of learning in the ancient world of that day. The Ptolemies endowed
a great institution here known as the "Museum," and made it the home of salaried scholars for the furtherance of science and literature. In connection with it was a great library, the first notable library known in history, which, when it was burned in the time of Cæsar, contained no less than 900,000 rolls. Beside many magnificent public buildings, and the tomb of Alexander, who was buried here, there was a temple to Serapis, which surpassed anything of the kind in the orient. The city was visited by many Roman emperors, and maintained its superiority as an intellectual centre until the rise of Constantinople dimmed its lustre.

The introduction of Christianity resulted in so many tumults of the turbulent monks, that the city gradually declined also in material prosperity. Finally the discovery of a sea route to India diverted all its transit trade between India and Europe, to the Cape route, and Alexandria fell on evil days. Under Turkish sway it went from bad to worse, having not over 5,000 inhabitants at the beginning of the 19th century, but the progressive and energetic Mohammed Ali then came to its rescue, and by new canals and docks brought the long period of decay to an end, and saved the city from extinction. It has since then continued to prosper, and with 320,000 inhabitants, of whom seven-eighths are native and the rest European, it is a fine monument to the great conqueror who founded it.

The shaft before us was erected as a landmark for sailors by one of the Roman governors of Egypt, and in 392 A. D. one of his successors placed a statue of the emperor Diocletian upon it, which has since disappeared. In the Middle Ages it was mistakenly connected with the tomb of Pompey, who was murdered
Position 1. Map 3.
on this coast, and is therefore called "Pompey's Pillar," just as the New York obelisk which once stood here on the beach north of us was called Cleopatra's Needle, although Cleopatra never had anything to do with it. This column is the only surviving monument of any size from the days of Alexandria's splendor. It is 89 feet high, while the shaft alone, which is cut in one piece, is 69 feet high. In the base there have been used blocks from older buildings, one of which bears the name of Sethos I, of the 14th century B. C. We are introduced by this monument to the GracoRoman world, which followed the older Oriental supremacy; but as we go through Cairo, we shall see how Islam brought in a revival of Oriental power, which again eclipsed that of the Greco-Roman age, upon which Islam and its prophet Mohammed followed. For one of the results of the Moslem invasion was the foundation of Cairo, which we shall now visit.

Follow on Map 3 the railroad southward from Alexandria, 129 miles to Cairo at the southern apex of the Delta. Turn then to Map 4, "Environs of Cairo," where you see, Cairo lies close to the east bank of the Nile. Find the two red lines, numbered 2 , which start from the citadel on the southeast side of the city, and branch toward the northwest. We are to stand now at the point from which these lines diverge and, facing northwest, look over that portion of Cairo and the country beyond, which the lines enclose.

Position 1. Maps 1, 3, 4.

## Position 2. Cairo, home of the Arabian Nights, the greatest city of Africa, northwest from Saladin's citadel to the Nile

Here for the first time we feel the charm of the Orient! Spread out before us is the city of Moslem song and story, the greatest seat of Saracen art, the home of the Arabian Nights. For two miles it stretches out before us, and it is twice as long the other way. Remember, we are standing at the eastern side, looking northwestward from the southeastern comer of the city. Before us is Alexandria, 130 miles away, where we left the Mediterranean. Our route hither lay along the western side of the Delta, which is between us and the Mediterranean. This city which we overlook is located a short distance above the southern apex of the Delta, on the eastern bank of the Nile. We cannot see the river itself from our present standpoint, but we can locate it precisely. Far out on the further edge of the city, to the left of the taller minaret on this nearest mosque, you discern a white building with a dome in the centre. That is the new museum, and it is located on this shore of the river, so that the Nile flows just behind it. Beyond the museum you see the dark line of palms which fringe the further shore of the river and form extensive groves there.

The course of the river is here due north; hence, as we look westward our line of sight is across it at an oblique angle. Here, too, though you perhaps have not yet noted it, we may observe how we have entered the vast valley or cañon which just below us here merges into the Delta. Do you see that low, gray line that rises just behind the dark band of palm forest behind the town on the left? That is the cliff forming the western wall of the Nile valley (see Map t), and we
are standing upon the walls of a stronghold that rises upon the corresponding eastern cliff. Between these eastern and western walls lies the fertile valley, with the Nile flowing much nearer the eastern than the western cliff; for those western bluffs are nearly ten miles away, while the river is less than two miles distant from us as we stand on these eastern heights. Behind those distant cliffs is the vast expanse of the Sahara stretching on and on across all north Africa to the far Atlantic, while behind us is the same desert interrupted by the Red Sea and extending across Arabia into the heart of Asia. We are looking across the great fertile trench which the Nile has cut through this desert of two continents, and at its northern end, where it merges into the Delta, here at our feet, lies the city of Cairo. Under the golden sunshine its soft brown domes and graceful, slender minarets rise against the masses of whitewashed dwellings or are confused among the deep shadows and sombre walls of sun-dried brick houses, the whole forming such an oriental picture as you may see elsewhere only at Damascus.

It is a romantic story, that of this ancient town. Far back in the days of those pyramid-building Pharaohs, whose marvelous pyramids out yonder on that distant cliff in the west we shall yet see, there was an insignificant town, somewhere along the eastern bank of the river, known as the "Place-of-the-Combat," because it was told in mythic story, that Horus and Set had once done mortal combat here for the supremacy of the Nile valley. A little later, in the third millennium before Christ, the great city in this vicinity was Memphis, on the other side along the distant bluffs a little further south, where we shall later visit it. North
of us but a few miles was the famous city of the sun, Heliopolis, to which we shall also pay a visit later on; but the oldest monument which we can find in the immediate suburbs of Cairo is out here on our left, where out of range lies a wretched little settlement known as "Old Cairo." (See Map 4.) There in the days of the Greek domination in Egypt was a town of some sort which they called Babylon, doubtless from some fancied resemblance between its old Egyptian name and Babylon on the Euphrates. There, when Egypt became a Roman province, was stationed a Roman garrison in a fortress, which still survives as the oldest monument in the history of Cairo. In 640 A. D., only eight years after Mohammed's death, the Caliph 'Omar with many misgivings, allowed a little band of fiery Arabs under Amr ibn el-As, to attempt the conquest of Egypt, and after several victories before reaching here, they besieged the Romans in the fortress of Babylon, which they finally took, and the defeated Romans fled to Alexandria. 'Amr, so the story goes, had left his tent standing by Babylon, when he pursued the Romans to Alexandria, and on his return he began a town there, which, because of this circumstance, was called Fostat, that is, "the Tent." The "town of the tent," which was the first Moslem town here, was therefore not on the present site before us, but by the river south of Cairo, and it is still over a mile and a half from the southern extension of the city (on our left). It was also called Misr, the Old Testament name for Egypt, as well as the usual designation for Egypt in the Koran, and the name Cairo was then unknown. Misr flourished, and became a prosperous commercial town, filled with fine houses and splendid bazaars. But in 1168 A. D., when Amalric, the Latin
king of Jerusalem, advanced to the conquest of Egypt, it was burned to save it from his hands. "Twenty thousand naphtha barrels and ten thousand torches were lighted. The fire lasted fifty-four days, and its traces may still be found in the wilderness of sand-heaps stretching over miles of buried rubbish on the south side of Cairo." Thus perished a priceless monument of medireval Moslem life and art.

Cairo had already been founded on the ground before us. From the beginning the caliph's governors and commanders had been accustomed to reside here and on the ground between here and Misr. They gradually drew some of the town up this way. Finally, when the new dynasty of the Fatimids came in under el-Mu'izz, in 969 A. D., he founded here a new town, which was called el-Kahira (Cairo), because the planet Mars, known as the "Conqueror" (el-Kahira), was in the ascendancy at the laying of the first stones. The people from burning Misr swelled the population of the already considerable town, and under the wealthy Fatimids it became a beautiful and prosperous metropolis. Next to nothing of this early Cairo of the Fatimids now survives; the city upon which we are looking is of later date; of this later city we shall have more to say as we pass on.

This masonry upon which we stand, is part of the citadel of Cairo, erected by Saladin in 1176 A. D., and its erection marks the beginning of the later Cairo which we have before us. You see the obsolete batteries on the parapets below us on the right. Those two curved salients beyond the guns, defend an entrance to the fortress known as the Bab el-Azab, over which floats the flag of the Turkish Sultan, with its
star and crescent ; for the viceroy of Egypt iṣ a vassal of the Turk. That Bab el-Azab gives access from the fortress to the park below us. You see one of the two white sentry boxes below at the door of the fortress on the right. The circular park with its rows of trees is the Place Rumêlah, and hither each year the pilgrims returning from Mecca march in procession amid great public rejoicing.

The most prominent building before us is the superb mosque of Sultan Hasan, the finest example of Saracen architecture in Cairo, and perhaps anywhere. It was built in 1356 to 1359 , and the Sultan was so delighted with it that he cut off the right hand of the architect, under the impression that it would then be impossible for the unfortunate man ever to design another, which might rival it. The splendid entrance on the other side is 85 feet high, and the massive walls, 113 feet in height, are built of stone taken from the pyramids. That dome, the lines of which are not a success, is a later work, for unhappily the original dome fell in 1660 , and was later restored. Of the four minarets designed by the architect, but three were erected, and one of these fell shortly after its completion and killed three hundred pupils of the school beneath it. One of the remaining two had to be rebuilt in 1659 , owing to an earthquake, and was made too small. Only the one here on the left is the work of the architect. It is the tallest minaret in Cairo, being no less than 270 feet in height. Its exposed position has cost the building much damage. In the innumerable conflicts of the Mamlukes, cannon were often posted upon the roof and trained upon the citadel where we stand. Of course, the defenders of the citadel responded in kind, and cannon shot may still be found in the masonry

[^2]of the fine old mosque. "In a quieter situation the mosque might have escaped injury, but even as it is, scarred with bullets and lopped of its original dome and minarets, it remains the most superb if not the most beautiful monument of Saracenic art in the fourteenth century."

This heavy flat-topped building, with the tall arches on the right of the Sultan Hasan's mosque, is the mosque or monastery of the Rifa'iyeh, an order of dervishes having several sects, one of which is noted as furnishing the performers of the most astonishing prodigies on the occasion of any public procession. They walk before the procession, thrusting nails into their eyes, swallowing burning charcoal and pieces of glass, or they lie down in the street and shatter great stones against their breasts. To another sect of the same order belong the remarkable snake charmers, now very rarely, if ever, seen by Europeans; but their remarkable feats are vouched for by credible witnesses. The numerous men and boys you will see about the streets of Cairo now, with small and harmless snakes, are not to be confused with these snake charmers of the Rifa'iyeh. Their mosque is unfinished, as you see. This striped mosque beyond the flagstaff on the extreme right is a modern structure of no architectural value.

You notice that no domes or minarets are visible along the river, the native town being here on the east, the nearer side of the city. There was formerly considerable space between the old native town and the river. Within fifty years this has been taken up by Europeans, whose villas now stretch north and south and bring the town down to the river on the west. He who loves the picturesque native life will mourn to see it thus closely
crowded by the prosaic life of the west, but fortunately the Moslem quarters here at our feet keep quite aloof and the tenacity with which they cling to their old ways and customs is surprising. Of the 600,000 inhabitants of the modern city, some 40,000 are Europeans, and their influence is, of course, very strong, working great changes in the mediæval city, which Cairo still was only fifty years ago. But in spite of these powerful foreign influences, this old city still remains the center of orthodox Moslem learning. It is the great university town of the whole Moslem world, and although the mosque of el-Azhar, the building in which the university is located, once had probably as many as 15,000 students, it still has some 7,000 people in it, including over 200 professors. The latter still continue teaching by rote the mediæval learning, which has always formed the curriculum of the university.

The mosque of the Sultan Hasan before us will answer as an index for locating some of the chief points in the modern city. The peak of the dome just cuts into the white façade of the luxurious Hotel Savoy, one of the several magnificent European hotels now to be found in Cairo. Nearer than this hotel, and seen between the dome and the shorter minaret, is the Abdin Palace, in which the present Khedive or Viceroy of Egypt resides. At the right of the tall minaret, just under the swell of the lowest balcony, is another palace, once occupied by the Khedive Ismail of Suez Canal fame; but it is now used as a hotel, called the Gezireh Palace Hotel. Gezireh means "Island," and the place is so-called because it stands upon an island in the Nile. We shall later see this

[^3]island and the bridge leading to it. The large whitedomed building on the left of the tall minaret we have already mentioned. It is the National Museum of Egypt, recently completed and occupied. There we shall examine some of the treasures which it contains as we go past on our way out to the great pyramids. To the left of the museum you may faintly discern the long, low barracks of the British army of occupation. Behind the base of the tall minaret, and seen over the roof of the mosque, is a grove, on the further edge of which (cut by the minaret) appears the vice-regal library, rich in oriental manuscripts. Another palace of the vice-regal family occupies the left end of this grove. Another patch of grove further to the left, and nearer the river and the barracks, marks the buildings of the different Ministries of Justice, Finance and the Interior, and Public Works and War. Out of range on the extreme right is the famous Shepheard's Hotel, the first European hotel established in Cairo. Thus the world of modern Europe is crowding upon medixval Cairo. Every winter thousands of tourists occupy the hotels, of which, besides the luxurious places we have mentioned, there are many of moderate price and comfortable appointments.

We shall now proceed to a somewhat elevated point outside the eastern wall of Cairo on our right, but out of our present field of vision. There we shall look nearly southward, directly across our present line of sight. Turn to Map 4 and find the red lines numbered 3 , extending from the east side of the city slightly west of south, which show more definitely what is to be our next position and our field of vision from it.

## Position 3. Citadel and Mohammed Ali Mosque, beyoul the Bab el-Wezir Cemetery, at the Feast of Bairam, Cairo

We have now descended from the citadel, you see, and, having taken up our position on the north of it, are looking southward toward it. On our right, but not included in our field of vision, is the city itself; on our left is the eastern desert, while behind us is the eastern half of the Delta. The city of which we see the eastern edge on our right, did not originally include the citadel before us, but where those massive walls now rise were the bare rocks of the eastern cliffs that bound the valley on this side. But when the great Saladin, the conqueror of the Crusaders, came to the city, with his fine military judgment he saw the necessity of a stronghold commanding the place, and preventing a besieging enemy from doing the same. In 1176 he therefore began masonry fortifications up yonder on the height now crowned by that tall mosque, and planned a great wall around the city below, which latter was never entirely finished. He employed on the work hosts of European captives, whom he took from the ranks of the Crusaders. Little of the old walls of the crusading days now remains, for the citadel has often been enlarged, remodeled and strengthened since Saladin's time.

The place where we stood overlooking the city is just on the right of the short, thick tower on the right of the two tall minarets, but further back, in a line directly away from us. Our line of sight there was across that along which we look at present, and, of course, directed toward our right as we now stand. The white buildings behind the parapets of the fort on the extreme left are the barracks of the present
garrison. The great mosque which surmounts the citadel with its tall and graceful minarets, is the most prominent landmark in Cairo. It was begun by the founder of the reigning dynasty of viceroys in Egypt, Mohammed Ali, after the blowing up of an old palace, which occupied the same place in 1824. His architects, as the building shows, were Turks. It was not completed until 1857 under Said Pacha, after the death of Mohammed Ali, which occurred in 1849. The great rejuvenator of Egypt is buried in a splendid tomb under one corner of the large dome.

The citadel marks the rise of a new and vigorous dynasty, and also the beginning of a new day for Egypt. 'The long domination of the Mamlukes, which for 600 years had cursed this fair land, was brought to a bloody end on yonder heights, when in 1811 on the 1st of March, they were craftily assembled in the narrow, high-walled approach to the citadel, which you see coming up from the town on the right (the Bab elAzab in the Place Rumêlah, seen from Position 2), and there by order of Mohammed Ali, they were shot down from the surrounding walls without mercy. Of the 480 , only one, Amin Bey, escaped by leaping his horse down through a gap in the crenellated wall to the moat below, whence he succeeded in making his way to the desert. The guides and dragomans of Cairo will show you a place some 90 feet high, up yonder on the right, which they affirm with the utmost gravity is the spot from which Amin Bey leaped his horse.

Nearer us is an animated scene characteristic of modern Cairo, in the Cemetery of the Bab el-Wezir or Gate of the Vizier from which the cemetery is named. It is there in the right-hand corner of the cemetery,
behind the large-domed tomb of Tarabai esh-Sherif on the right. The city wall does not enclose the cemetery, but you will see some of its angles there on the right of the tomb of Tarabai, with the large dome, after passing which the wall turns to the left, beyond the last tent at the other end of the cemetery; and you can see it extended eastward before the citadel, just in front of the heavy tower that rises below the citadel wall on the left. At that point there is another gate, and the streets from both gates pass along in front of the citadel below the spot where we overlooked the city for the first time.

You are, without doubt, wondering at these tents and houses in the cemetery. The townspeople are celebrating what they call the "Lesser Feast," a very interesting festival, which occurs after the fast of Ramadan. The occasion of the rejoicing evident here is very natural. These poor people have been fulfilling the most rigorous obligation imposed by the Mohammedan religion; that is, in the celebration of the fast of Ramadan, every orthodox Moslem is forbidden, during the time between sunrise and sunset for the entire month, to touch food. Naturally when this severe requirement has been duly complied with, they are quite ready to celebrate its termination. The first three days of the following month, called Shawwal, are therefore devoted to feasting, rejoicing and congratulations. The celebration often goes by its Turkish name, "Bairam." However incongruous it may seem, you see that these good people have chosen the cemetery as the place in which to celebrate their feast; this is commonly done at this time. Some of them have permanent dwellings here, which they temporarily occupy at the time of this feast. These are the houses
which you see scattered through the cemetery; they are erected over the tombs of the departed members of the family. Others who have no such dwelling erect a tent over the tomb. On at least one of the three days of the celebration, they come to the cemetery laden with palm branches which they strew upon the tombs. The house just before us shows how such dwellings are arranged. The court covered over with plaited branches contains the tombs of the dead, while the roofed portion is the dwelling in which the relatives stay during the sojourn at the cemetery.

The hum of voices reciting the Koran, the shouts and the gay laughter and the rejoicing of the poor at the gate of the cemetery, as they receive the food distributed by the rich, all this, with the citadel and its splendid mosque outlined against the bluest of skies in the distance, gives the traveler a typical scene of oriental life, as it is found only at Cairo. Behind us at the Bab enNasr, which is also on this side of the city, the jubilation and merry-making are even more marked than here, and the temporary booths, with piles of sweets, the merry-go-rounds, the dancers and the rejoicing multitudes give one the impression of a large country fair. In a few days these same people will be following the pieces of the sacred carpet or "kisweh" from the citadel to the Mosque of Hasanên, in a rejoicing procession to which all Cairo will turn out. That procession is one of the most interesting public events at Cairo, and we shall later have the opportunity of observing it.

Meanwhile, we shall turn half round, at the same time moving a short distance northward or to our right, and shall look across the city southwestward. Find on Map 4 the red lines numbered 4, which start

Position 3. Map 4.
from the east side of the city and branch southwestward to the pyramids of Gizeh about ten miles away.

## Position 4. Cairo, looking southwest across the City to the Great Pyramids, that furmished stone for many of its buildings

The cemetery and the citadel are now out of range on our left; on our right is the northern quarter of the city, behind us is the eastern desert, while the prospect before us again is the southern part of the city, but we now look southwestward, not northwestward as when we stood on the bastion of the citadel (Position 2). But we have much the same prospect of domes and minarets rising on every hand from a confused expanse of houses showing no perceptible order or arrangement, because there is none, and they lie on innumerable little crooked lanes, narrow and tortuous, as if the houses were dice which had been shaken up in some colossal hat and thrown down as they happened to fall, only taking care that every spare inch of ground should be covered. That high-walled building on the extreme left, of which we see only one corner, is the mosque of Rifaiyeh, which we saw by that of the Sultan Hasan from the citadel (Position 2). Immediately on its right over the dome with the peak awry, you see the sandhills and rubbish heaps on the south of the present city, where the old vanished city of Misr, 'Amr's "city of the tent" was located. Between the dome just referred to and the distant sandhills you notice a horizontal whitish streak, beginning just below the peak of the dome and extending toward the right. That is the court of the oldest mosque in Cairo. It was built in 877-879 A. D. by Ibn Tulûn, the first independent Sultan of Egypt, who freed himself from the weak caliphs

[^4]of Bagdad and made Egypt a great power, governing Syria and Mesopotamia also. In his day Cairo did not yet exist, but over where you see the sand-hills were the busy streets, teeming docks and swarming markets of old Misr. Outside Misr, on its northern and western outskirts, Ibn Tulûn built yonder ancient mosque, which has now been standing over a thousand years. The only mosque in Egypt which is older, is the one built beside the fortress of Babylon, by its conqueror Amr ibn el-As, in 640 A. D.; but that is so much altered by restoration and addition that it is no longer the mosque which Amr built there. From here, then, we see how the masque of Ibn Tulûn forms a link with the old Cairo on the south, which gradually moved northward until the present city was founded here at our feet by the Fatimids in 969 A. D.

Only a very little of the old Fatimid city still remains, but the city, which we have before us, is mainly a work of the 14 th century and later, the city of the Arabian Nights. For it was here and in the city as you now see it from this point that the Arabian Nights, with their charming pictures of the life of the common people, the life of the shops, houses and bazaars, were put into their final form, though as every one knows, they contain tales of far earlier date, some of them even dating from an age as remote as the 12 th Dynasty, of the old Pharaohs 4,000 years ago. Think of it! some of the tales which these Moslems of the Cairo bazaars love to listen to, are almost as old as those pyramids, of which we get here our first glimpse, dimly rising on that western horizon, where the faint line of the western cliffs mingles with the paler hue of the afternoon sky (Map 4). And those pyramids, to which we shall yet pay a long visit, furnished much of the stone
for this city. When Saladin built the citadel, and employed on the work the Europeans whom he had captured from the ranks of the Crusaders, the stone which the wretched captives wrought, was taken from the smaller pyramids of Gizeh. In mosque architecture, however, the use of stone did not become extensive until the 14th century; thus the old mosque of Ibn Tulun is of brick plastered over, but the magnificent mosque of the Sultan Hasan, which we saw from the citadel, is of stone taken from the pyramids over yonder on the horizon.

It would take too much of our time to identify all these minarets before us, date them and connect them with the great events in the history of Moslem Egypt, with which many of them were identified in one way or another. But we must look at these two at our feet for a moment. Built in the days of the Circassian Mamlukes, within a generation or two of the Turkish conquest of Egypt, they are exquisite examples of the classic age of Saracen architecture. If you could have entered the mosque of Ibn Tulûn or any of the older mosques, as they were left by their builders, you would have found no dome, no minaret, and no ornate façade, but simply a court surrounded by a colonnaded portico, dispensing with the slightest trace of architectural decoration without and severely plain within. It was the Mamlukes of the 13th century who gradually brought in these things, although the elements of a façade were introduced as early as the latest of the Fatimids, and the tower which preceded the minaret was already found on the mosque of Ibn Tulûn. Five times a day the Muezzins appear in the balcony of these minarets and summon the faithful to prayers. Of the real purpose of the dome we shall have more to

[^5]say when we have visited the so-called tombs of the caliphs.

What a volume of history this old town is, if time and patience would but permit us to search for all the landmarks of great events and imperial epochs, which swarm around us on every side! From this point we see more effectively than we shall see again anywhere in this valley, the monuments which span the whole mighty sweep of oriental history-yes, even the whole history of mankind. For out there on the horizon are the greatest remains of early man surviving anywhere in the world, and at our feet is the city of Egypt's latest masters, the home of the Moslem conquerors; while distributed along the river as we ascend, we shall find the monuments of all the ages which fill out the vast epoch lying between these two extremes. Nowhere else in the world can you overlook such a metropolis and at the same time see the greatest monuments of earliest human history, looking down upon the roofs of the modern city.

Let us now visit one of the best of the works of the Saracen architect, and when we have done so we shall descend into the streets of the old city. We will leave this city of the living and go out into the desert east of the town, nearly a mile behind us to a city of the dead. This next position is shown on Map 4 by the red lines numbered 5 on the east of the city. Evidently we shall be looking a little west of north.

## Position 5. A. Ship of the Desert" passing the tombs of by-gone Moslem rulers, outside the east wall of Cairo

These ladies of modern Cairo who are out "smelling the air," as they say when out for an airing, do not
seem oppressed by the solemnity of the place. Indeed, as one of them has removed her veil, there is much doubt whether they belong to the class of reputable ladies from the upper ranks of society. However, the opportunity of meeting and conversing untrammeled with foreigners is one which does not come every day to the members of the harem, and this may perhaps excuse what is considered by a well-bred Cairene an unpardonable lack of reserve and modesty. What a romantic carriage! Does it not recall innumerable scenes from the Arabian Nights in the good old days when wonders awaited the fortunate hero at every street corner; and the fair ladies of Cairo were but waiting for his appearance to bestow upon him happiness, favor and unbounded wealth?

A generation ago, such a vehicle usually conveyed the bride at every wedding. With tinkling bells and gayly caparisoned camels it made a brave show as it carried to the waiting bridegroom the vision of loveliness, whose face, as is always the case in Moslem marriages, he has never seen, and whom he might instantly divorce with a word, if the fondly anticipated "vision" turned out to be a disappointment. Such a harsh procedure, though perfectly legal in this land of the Koran, is, however, rarely practiced on the bride of an hour, but she is allowed time to recover from her disappointment in not having met the expectations of her husband, and in the course of a week or ten days is quietly divorced in private; while the fastidious husband then begins negotiations through a female member of his family for another unseen bride.

It is easy to see that we are on the border of the desert. I have often referred to it as on the east of the city. Cairo is now on our left and we look northward,
with the desert on our right, along the northern end of that line of royal tombs which extends along the entire eastern side of the city, except where interrupted by the citadel, which is now behind us (Map 4). These beautiful sepulchres were erected from the 13 th to the 16 th centuries by the Bahri and Circassian Sultans, the Mamlukes who followed the age of Saladin. They are the product of the finest age of Saracen art, and place us under a heavy debt of gratitude to the splendid artistic genius which created them. We have but a portion of them before us, only the northern end indeed. They were liberally endowed by their builders, each of whom left a large income from lands and taxes for the support of a body of sheiks, and keepers attached to his respective mosque, and these with their families resided in the mosque enclosure. But Mohammed Ali confiscated the property of these mosques early in the 19th century, and since then they have fallen into sad decay. A commission of Europeans appointed by the government has in late years devoted much time and liberal government appropriations to the preservation and judicious restoration of these monuments, and their efforts have been crowned with the greatest success. We may therefore hope that the life of these priceless heritages from a great past has been indefinitely extended.

The large one on the right, with the high wall and those two minarets, was built by the Sultan Barkuk, and though he died before its completion, it was finished by his son, the Sultan Farag, in 1410. These three domes on the left, with their delicate ornamentation, belong to the extensive foundation of the Sultan Bursbey, in 1431. The fourth dome in this same row on the left, belongs to the mosque of the Emir Yusuf,
the son of Bursbey, while the last is that of the Sultan el-Ashraf. This line of yellow domes on the east of the city forms one of the loveliest sights in or about Cairo, and is an architectural display of Saracen genius which cannot be found anywhere else. Let us now examine more closely one of the most notable and, undoubtedly, the most beautiful of this entire group of tomb-mosques, that of Kait Bey; and while there we shall explain why we have called these buildings mosques, although they are also tombs.

The mosque of Kait Bey, to which we now go, is a short distance to the southwest of us; that is, on our left and at the same time behind us. We shall therefore move to the left and backward to reach our next point of view.

## Position 6. Tomb Mosque of Sultan Kait Bey, the most beautiful of the Tombs of Cairo

As we left our last point of view, we turned almost toward the south, and we are now facing the southwest. The city is now on our right, the desert on our left, and also behind us, stretching away to the Isthmus of Suez and the plains of southern Palestine. Here before us rises the lovely tombmosque of Kait Bey, built in 1474, by the last of the really great Mamlukes who preceded the Turkish conquest, which occurred a generation later. The powerful and sagacious Kait Bey inaugurated a veritable Augustan age for Cairo, and brief as it was the city was adorned with a host of magnificent buildings, which to-day form its chief architectural beauties. As we have before remarked, a mosque was originally only a place of assembly in the open air, a square court
surrounded by a colonnaded portico. When it became customary to inter the great in a mosque, a dome was placed over the addition containing the tomb. As an architectural element the dome was originally and for a long period the invariable accompaniment of a tomb in Saracen architecture. This dome, the gradual development of the minaret, and the addition of a façade taken from the buildings of the Crusaders, gave the tomb-mosque a finished architectural unity which the earlier building did not possess. These important additions necessitated many supplementary details, which were new to the mosque. See how skilfully the transition is made from the square building below to the circular base of the dome which rests upon it. That exquisite dome is, like the rest of the building, of stone, and the rich carving upon it is the perfection of geometrical design in which the Saracen artist has contributed so much to decorative art.

Under Saladin the plan of a mosque was modified and the four porticoed sides of the old court were extended outward in the form of a cross, a form introduced from Persia. The court at the same time became smaller and the four ends of the cross, or the transepts as we might call them, were used by teachers of the four great schools of orthodox Moslem theology as lecture halls. Such a building was and still is called a "medresa," or place of teaching, a college. By the time of Kait Bey, this form had in its turn been subjected to change, in that three of the four transepts had gradually been reduced in size and the central court so contracted that it was roofed over. Various irregularities also modified the old, fixed plan, so that you can hardly follow it here. Although in decorative beauty such buildings as these are unsurpassed in any

Position 6. Map 4.
art, yet as a whole they do not produce an impression of unity and repose such as we receive from the classic or the ancient Egyptian temples. The only building in Cairo, comparable to the works of ancient Egypt, which we shall later visit, is the mosque of Sultan Hasan, which we viewed from the citadel.

We must now examine some of the more important interior arrangements of Kait Bey's mosque. That wall which faces toward our left, looks southeast, that is, toward Mecca, in which direction every Moslem must look when he prays. Hence if we enter this tall, narrow door in the front we shall find ourselves in a large hall of worship, which in the original mosque-form, was one side of the court, roofed over for the protection of worshipers. On the inside of that wall, therefore, we shall find the arrangements by which the Moslem architect designates the proper direction for prayer in such a house of worship. There, too, we shall be able to observe the tracery of those arched windows of which we see a pair on either side of the small circular window in the centre.

Position 7. The prayer miche, southeast toward Mecca, and the mulpit in the Tomb Mosque of Kait Bey, Cairo

How do you like walking about on a not too clean oriental floor with your shoes off? Or if the attendant has been amiable he has allowed you to put on some old felt slippers over your shoes, or even wrap them up in some tattered bits of rags which he has at hand for the purpose. But no Moslem would think of entering the holy place on such a compromise. He will remain with bare feet until he steps outside the door of the sacred building. See how the light filters
through the beautiful tracery of those stained windows in the upper part of the wall before us, which we saw from the outside. It is in such designs as this that the Saracen artist is unexcelled by any other. This rectangular transept before us was, in the original court-mosque, that side of the court facing Mecca. It was then a mere roofed portico on the side of the court, and its back wall was arranged as you see this one.

That niche there is called by the Moslems the "mihrab," and it marks the proper direction for prayer, which they term "kibleh," or "facing"; for it is very important that a Moslem should always pray toward Mecca. Mohammed first made the kibleh toward Jerusalem, which is holy alike to Jew, Christian and Moslem, but when he failed to convert the Jews to Islam, he changed it to Mecca, and subjected the Jews to the severest persecution ; at least those in Medina, his home after he forsook Mecca. On the further side of the prayer niche you observe the "mimbar," or pulpit, from which the Friday sermon or "Khutbeh" is delivered every week. The preacher, who is not specially ordained for his office, but may be any person of theological learning, comes in and seats himself on the steps while the Muezzin enters and proclaims the hour of prayer. Then the preacher rises and, standing on the second step, delivers a short sermon, for tradition avers that the prophet affirmed that "the length of a man's prayers and the shortness of his sermon are signs of a man's common sense." Christianity has quite reversed this estimate. The wood-carving on some of these pulpits is among the finest decorative designs produced by the artists of the Egyptian sultans.

A man need not possess all these appurtenances in order to be able to pray. Wherever he is, he must pray five times a day, and consider himself very lucky that he is not obliged to pray oftener, for tradition has a curious story that Allah first demanded fifty times a day, but that Mohammed, on hearing from Moses that he had failed in attempting to hold the Hebrews to this number of daily prayers, returned to Allah and asked a remission, which request being granted, he asked for another remission, and he continued to ask until the number was reduced to five, where it remained. Many Moslems are undoubtedly true to this obligation, and there is no more impressive sight than to see one of these great Cairo mosques filled with a vast multitude zealously engaged in worship, and swaying when they bow down for the prayers, as if a great wave of the sea were passing. But there are many whose prayers are either not performed at all, or only now and again in the most perfunctory manner.

There is, however, a ceremony in which every Moslem joins with the utmost fervor, and that is the procession of the Kisweh, or sacred carpet. In order to see this we must return to the city and find a good place for observing the procession as it passes from the Rumêlah before the citadel (seen from Position 1).

## Position S. The IHoly Carpet parale with the Mahmal, before the departure of the pilgrims for Mecea, Cairo

There is nothing in Cairo which so strikingly reminds us that we are in a country professing the religion of Mohammed, as the ceremonies connected with this pilgrimage to Mecca, the city where he so long labored and over which, after long exile, he finally
triumphed. It is now two or three days since the feast of Bairam, which we visited at the cemetery of the Bab el-Wezir, the gate by the citadel; and here is a celebration to which the Moslem turns out with even more delight than to Bairam. Every year at the expense of the Sultan a fine carpet or huge fabric for festooning the Kaaba at Mecca is made in this city, and we are now viewing the procession which is bearing it from the citadel to the mosque of the Hasanên, where the pieces will be sewed together and lined, in readiness for the departure of the pilgrims.

We cannot here see the carpet itself, but the "mahmal" which accompanies it is even more sacred. We refer to the curious object which you see at the head of the long procession. It is a pyramid of woven fabric richly embroidered, surmounting a roughly cubical base, of the same material. The whole is stretched on a wooden frame, and contains nothing. Brazen ornaments at each corner and a similar adornment crowning a cylinder at the top complete the strange object. Attached to the ornament at the top are two copies of the Koran, the holy scripture of Islam. It is all mounted upon a magnificent camel, which is here so hidden by the mahmal and the crowd that you can scarcely see it at all. In this way the mahmal proceeds to Mecca with the pilgrims and with them also returns to Cairo.

The origin of the object is interesting. The Sultan Negm ed-Din, whose son was the last of the dynasty of Saladin, had a beautiful Turkish slave in his harem, who eventually became his favorite wife. Her name was Sheger ed-Durr, which means "Spray of Pearls," and on the death of the last of the line of Saladin, she claimed the throne. Although the Moslems are always exceedingly averse to having a woman as sovereign,
she ruled successfully for several years and performed the pilgrimage to Mecca in a haudag or camel saddle of royal splendor, which she after that regularly sent with the pilgrims each year as the outward symbol of her presence, although it was empty. They married her to a husband as soon as they could, and in a fit of jealousy she had him murdered in his bath, whereupon she was taken to the citadel and imprisoned. There she "vindictively pounded her jewels in a mortar that they might adorn no other woman," and then in the presence of the woman who had occasioned her jealousy, she was beaten to death and her body flung into the moat of the citadel. Some one finally gave her decent burial and her tomb still survives here. But the great Sultan Bibars continued the custom of sending the empty haudag, and despatched the first one to Mecca with the pilgrims in the year 1272 or 1277 A. D., from which time it has always been a part of the procession. It is therefore a memorial of the beautiful but ill-fated "Spray of Pearls," which here heads this procession over six hundred years after the unfortunate queen's death.

But the Moslem sees more in it than a woman's camel saddle; for him it has become sacred beyond expression. Lane narrates that in 1834 he followed beside the mahmal as it was brought into the city at the return of the pilgrims, and that as he did so he grasped and held the fringe of one side, uttering a pious exclamation to soothe the officer in charge of it, who looked at him with some question as to the propriety of such a liberty. But Lane was dressed as an Oriental and was thus mistaken for a Moslem. Having later told the incident to one of his Moslem friends, the latter expressed the greatest astonishment, and said, adds

[^6]Lane, "that he had never heard of anyone having done so before; and that the prophet had certainly taken a love for me, or I could not have been allowed: he added that I had derived an inestimable blessing; and that it would be prudent in me not to tell any others of my Moslem friends of this fact, as it would make them envy me so great a privilege, and perhaps displease them."

In a small circle on the front of the pyramidal top of the mahmal you see the monogram of the present Sultan of Turkey, who is the head of the Moslem heirarchy, though the legitimacy of his succession is seriously questioned by the Moslems themselves. Guarding the mahmal is a circle of horsemen from the army of Egypt. It was these men under English leadership and supported by some English regulars who rescued the Sudan and regained Khartum, to which we are to pay a brief visit at the end of our journey. That long line of camel riders behind the mahmal will in a few days begin the weary desert journey around the north end of the Red Sea and southward to Mecca. Those who can afford it, however, are able to facilitate the journey in the most prosaic modern fashion. They go by railway to Suez at the head of the Red Sea, thence they take a steamer to Giddeh, the port of Mecca, from which they can reach the holy city in a few hours. At Mecca the pilgrims undergo a long and wearisome ceremonial lasting some days, and the sacred carpet is draped about the Kaaba, which is a rectangular shrine in the centre of the great mosque court of Mecca. The old carpet of the year before is taken down, cut up and divided among the pilgrims. Something over four months after the procession has left Cairo, its return is announced by a special messenger, and the pilgrims are
received with great rejoicing, the mahmal being brought in with much the same ceremony which we observe here.

It is considered the pious duty of every Moslem to undertake this arduous pilgrimage at least once in his life, and its maintenance, involving a military escort, rich gifts to the city of Mecca and many other expenses, costs the government annually some $\$ 250,000$. Besides the expense the pilgrimage is a fruitful source of disease. Many die from the hardships incident to the desert journey, and it is a sad and touching scene when the caravan returns, to see the wives and sisters who go out to meet and receive their husbands or brothers only to learn that they have perished in the desert. The reception of the returning caravan is always accompanied by the loud wailing and piercing shrieks of stricken women, as they learn of their bereavement. But worse than this is the importation of epidemics, especially cholera, from the unsanitary houses of Mecca, in which the pilgrims have lived. Many a blasting visitation of cholera can be traced directly to this source.

There is no time when so many gaily dressed Moslems may be seen in the street as at this celebration before us, but even on any ordinary day the shifting panorama of the Cairo streets and bazaars, will afford the western eye, accustomed to the soberest and most prosaic of city streets, the keenest enjoyment and delight. The mass of bright color constantly changing with kaleidoscopic variety and bewildering rapidity, is of itself a continual pleasure. We have often mentioned the Arabian Nights, but you will find things around every corner here which will make you think that you have walked into the world of the Arabian

Nights, as Alice stepped into Wonderland through the looking glass. The barber shaving the heads of the faithful in an open booth, which is really a part of the street; the little street restaurant, where the patrons squat in the mire before the low table and devour a plentiful repast for a penny; the water carriers bowing beneath a heavy water skin; the seller of cool sherbet, jingling together his brass cups; the woman of the poor classes with a child astride of her shoulder; the Cairo houris with faces all veiled save the thrilling black eyes; fine old sheiks with long white beards and massive turbans; slow plodding camels with swaying neck; tiny donkeys staggering beneath the garden truck of some poor peasant; staid merchants sitting on the bench or mastaba of their bazaars and smoking the long pipe lazily or sipping their coffee as they indifferently watch the passing throng; all this framed in a narrow winding street, with picturesque, grated windows, from which veiled faces look down upon the scene, while a thousand varied cries of pedlars, donkey boys, auctioneers and beggars mingle in bewildering confusion with the constant hum of conversation from the bazaars, and the nose is greeted by the strange aromatic odor which always fills these oriental streetsall this I say conveys such a jumble of impressions and appeals to so many senses at once, that the unaccustomed visitor revels in it all with a delight that must be experienced to be appreciated. I know Europeans who have lived in Cairo for a generation, who nevertheless find as much pleasure in these charming Cairo streets as they did when they first saw them.

But now we must leave all this and step into one of the courts that we may see what one of these oriental houses is like.

## Position 9. The hurem windows in the court of a wealthy Cairene's house

The houses of the rich and noble Cairenes give little indication on the outside, of their interior beauty and richness. Indeed the streets are too narrow to make any exterior façade effective, even if it were present. As we have come in here from the street the porter has taken us through a passage with at least one turn and sometimes more, in order to prevent passers in the street from looking into the court. On two sides of it are ranged the different rooms and apartments of the house; the ground floor, the carved doorway to which you see here on the right behind the tree, is reserved for the men and is called the "salamlik." There the master of the house receives his friends, who, according to Moslem politeness, must not give the slightest intimation that they are aware of the existence of any women in the house. If any of these friends are taken to the second floor they raise their voices and let it be known that they are coming, in order to warn the women and give them time to retire or to veil themselves; for the harem, the apartment of the women, is on the upper floor. There is rarely any higher floor in a Cairo house.

Yonder elaborately and exquisitely carved windows are those of the harem, and there the ladies of the house spend their time listlessly lounging, and rarely going out for an airing. They lead the most uninteresting of lives, possess no culture or next to none, and by the men of their own race are given an exceedingly bad character, probably far worse than they actually deserve. But the stories of female intrigue and ingenuity in evading the vigilant husband, which one hears in Cairo, are legion, and some of them

[^7]must be true. It is little wonder that women so penned up should resort to almost anything as a relief from the stifling life they lead. But woe to her, whom one of these lounging servants, who are always about the court, betrays! She is then taken, or at least formerly was (even though the Koran requires four eye witnesses, who are almost never forthcoming), to the Nile, bound and cast in. Such punishment is, however, more common among the poor. But it goes back to hoary antiquity, for a papyrus of the 17 th century B. C., now in the museum of Berlin, relates the intrigue of a priest's wife, who on being betrayed by the priest's steward, was cast into the Nile.

But the women are not the only sufferers. Said one of Lane's friends to him: "How many men in Cairo have lost their lives on account of women? A very handsome young libertine, who lived in this house which you now occupy, was beheaded here in the street before his own door, for an intrigue with the wife of a Bey, and all the women of Cairo wept for him."

Those windows up there have probably witnessed such scenes. What superb works of art they are! It is in some of these carved windows of Cairo, that the finest work of the Saracen designer is found, though unfortunately they are rarely as old as such work in the mosques. They are too fragile and exposed, as well as too good conductors of fire to survive long. They are known as "Mushrabiyeh," which means "drinking place," because the porous jars of drinking water, in common use in Egypt, are placed here and exposed to a constant draught that the water which penetrates from the inside to the outside of the jar, may rapidly evaporate and thus produce cold, which cools the water
remaining in the jar. Without understanding the principle of physics involved, the natives thus obtain cool crinking water without the use of ice. The presence of these jars in such windows has thus given them their name ; these little projecting oriels, of which you see three in the middle window, are the receptacles of such jars. The whole of the front and sides above the carved plinth at the bottom is a very porous grating through which the wind circulates freely. Such a grating is made of carved, globular balls, joined like beads to each other by connecting pegs of wood, a construction often exquisitely wrought and involving infinite labor. Cook's tourists buy quantities of the crude modern specimens of such work, which mostly fall to pieces after they have gotten them home. The hands that wrought yonder windows have long been dust, and their successors have ceased these many years to possess the skill and patience to produce such masterpieces. Neither have they the support and encouragement of rich and powerful patrons as in the days of the prodigal Mamlukes, to whom, dissolute and venal as they were, we owe so much of the beauty that fills modern Cairo.

But now we must leave the things of this later Egypt and pass to the long bygone age and the vanished splendors of the Pharaohs, of which nevertheless enough remains to furnish us with a faint picture of what was once here. The treasure house of such things as have survived and need shelter in a permanent home, is provided by the Egyptian government in the splendid new museum of Cairo, which we discovered from the citadel (Position 1). It was formerly in an old palace by the suburb of Gizeh, on the road

[^8]to the pyramids, and before that at Bulak, where the museum was founded by Mariette. Repairing to the new building, we shall glance at a few of the more important or interesting of the vast host of antiquities with which it is filled.

## Position 10. Diorite portrait statue of King Khafre, the builder of the Second Pyramid of Gizeh, Cairo

We have stepped in from the busy streets of Cairo, the distant noise of which is still in our ears, as the descendants of this man's subjects throng past the door of the museum. We are standing here in the National Museum of Egypt, which is but a short distance from the great Nile bridge that will later lead us out to the pyramids of Gizeh. Meantime we are to have an audience with this mighty Pharaoh who built one of them. Does he not look every inch a king? Thus he sat in the presence of his assembled court 5,000 years ago, and thanks to the skill of his court sculptors, we are able to view him to-day almost as if he were in the flesh before us. The mottled material somewhat detracts from the fine lines and clearness of the features; that material is diorite, and although it is so hard that it turns the edge of a steel tool to-day, the artist of 5,000 years ago, with his chisel of copper, has cut the fine lines of the mouth and the delicate curves of the nose, as firmly as if they were wrought in wood. For the artist of that ancient day possessed not merely the conception of such a king, but also the technical experience and skill to put it into the hardest of material, which no sculptor of today would dream of attacking. What was that conception? It was not an ideal conception; it was but
the king as he saw him; so that the statue before us is the result of an attempt to put the king into stone by a process of exactly imitating his every feature, producing at last an exact counterpart of his person as he was wont to appear at court on great occasions.

There he sits, in calm and conscious superiority over the mere human creatures about him, the Pharaoh, whose ordinary designation was the "good god," before whom all men kissed the dust, of whom his son-in-law and a great favorite relates with pride that he was not permitted to kiss the ground merely, but by special grace might also kiss the Pharaoh's toe.

His costume is the simplest ; it dates from remote prehistoric days, and we shall find it 1,500 years later, on the statues of Ramses II at Abu Simbel (Position 95). It consists of a linen headdress with folds hanging to the breast in front, bearing the sacred uræus serpent on the forehead, the Pharaonic crest, which you can barely see from here; an artificial beard attached by straps passing up behind the ears; besides a plaited linen kilt from the waist to above the knees. Thus the body is largely exposed, and we can observe how superbly in such refractory material, the ancient sculptor has modeled the limbs. While the muscular development of the upper arm is summarily rendered, the breast bones a little exaggerated, the hands, feet and lower limbs are admirably done. It is fortunate indeed that the nude or semi-nude was a common thing in Egyptian life ; had it not been so, the sculptor would have been as unfamiliar with the human form as he shows himself in Babylonian and Assyrian sculpture. The throne upon which the king sits is a plain stool without a back, the slab or plinth behind the Pharaoh being merely a structural device for the protec-
tion and safety of the body, such as is found in all statues in stone, even where there is no seat. The stool or chair is conceived by the artist as supported upon two lions, one at each side. The one on this side is clearly traceable, though much conventionalized; you see the head and the fore legs, with the paws resting on two bases ornamented with rings, while the hind legs may also be discerned at the back corner on this side. The space between the fore and the hind legs of the lion is filled with a symbol of the union of Upper and Lower Egypt, consisting of a papyrus stem, the plant of Lower Egypt, and the lily, the flower of Upper Egypt, intertwined about the hieroglyph for "union," thus forming the Pharaoh's coat of arms.

This masterpiece is unsurpassed by any such work in the Old Kingdom, and it is unfortunate that its age has been called in question. The evidence adduced for a later date for the statue is, however, quite insufficient. We shall be able to appreciate the exalted character of this work if we now contrast it with one equally good, but of distinctly different spirit. Let us remember as we leave it that we shall later see the building by the Sphinx, in which this and several more statues of this king were found, just as they were thrown into the well there by ancient vandals.

There is also one other object visible from here, which it will be instructive for us to examine, before we visit the great Gizeh cemetery. Notice that massive stone tablet against the wall on the right of our statue. That represents roughly the front of an ancient Egyptian house, with the tall, narrow door in the middle. Of course, it is but a model much reduced in size. Such a house-front carved in stone was put against
the west wall of every tomb chapel, such as we shall later see; the object being to provide for the deceased a door, through which he might come back from the world of the dead in the west, and rejoin the world of the living in his tomb chapel and there enjoy the offerings of food, drink, clothing and various other necessities constantly kept there by his surviving relatives. We call such a tablet a "false door."

## Position 11. The famous wooden statue called the Shekh El-Beled, in the Cairo Museum

This is perhaps a more remarkable work than the one which we have just studied. You perceive at once that the softer material has here permitted the artist greater flexibility and life-likeness. But what a totally different person! Only a nobleman in that ancient day could have afforded to employ the court artists on such a work as this; he is a noble then, but a good-natured, pudgy-faced, vulgarly self-contented individual, the very opposite of the divine Pharaoh looking out upon us with a level glance of calm and lofty superiority. Here, then, is the comfortable and self-satisfied Egyptian noble of a distinctly lower class than the Pharaoh, just as he appeared upon his wellstocked estate, leaning upon his staff; as he was wont to do, when the sleek herds and snowy flocks were led before him for inspection, as we see them so often in the relief sculptures of the tomb chapels.

This is a work of the Old Empire, and in spite of the scars of 5,000 years, the whole preserves an air of vivacity which is surprising. But what must it have been when it left the hand of the artist! Its surface was covered with linen deftly glued on ; into the

[^9]texture of the linen was rubbed a paste or stucco forming a perfectly smooth surface for the reception of the colors; for this statue, like almost all Egyptian sculpture, was colored in the hues of life. Besides this, the eyes were inlaid of transparent rock crystal, polished until it shone like glass, in the middle being an inlaid circle of black crystal representing the iris, in the center of which is a silver nail, a perfect counterfeit of the pupil. Such an eye, exquisitely put together and mounted in a copper socket, was set into the hollow left for it, and to-day these eyes look out with a gleam of life that in some cases is fairly uncanny. The modeling of the face is done with unrivaled skill, but in that of the body there was little opportunity for the sculptor, as the contours of the muscular development were so lost in fat that they have disappeared. The right foot and most of the left leg have been restored.

Large numbers of portrait statues, of just this sort, but wrought in stone, have been found in the tombs of the Old Kingdom, walled up in secret chambers, where they were never seen by friends or relatives. The sculptor therefore did not make them with the idea that they were to adorn a niche in a villa, or be erected in a public square; he knew that his work was to be entombed with the dead, and shrouded forever in darkness. What then was his object in bestowing upon these figures such unlimited time and pains to render them true and vivacious portraits? The Egyptian believed that the survival of a person in the hereafter depended upon his connection with a body, such as he had animated during his earthly life. Without such a body, the personality is annihilated and disappears. Hence their embalmment of the body, which
is but an effort to insure to the departed in the future life the use of the same body which he had possessed before death. But the Egyptian conceived that the mummy might be destroyed or perish with age. These portrait statues then were intended to be more durable bodies, false bodies, which should take the place of the real bodies when the latter should have perished. The statue would then still serve the deceased as his old body had done, connecting him, as he thought, with the world of real and substantial existence. Thus it was that while the sculptor knew that his work was to be buried forever, he was obliged by the person whose portrait he executed from life, to make an exact reproduction of his model's person. In this art the sculptors of the Old Kingdom have never been surpassed. This is acknowledged even by classical archæologists, for the well-known Charles Perrot says: "It must be acknowledged that they (the Memphite artists) produced works which are not to be surpassed in their way by the greatest portraits of modern Europe."

Wherein then does the special superiority of the Greek consist? In its ideal character ; for his rare imagination, his matchless sense of the beautiful created for him a conception of the human form, ennobled beyond reality, and expressing thoughts that are not of stone alone; and such conceptions when embodied in marble have something of an ideal beauty, which of necessity is vastly higher than any imitation of natural detail, however perfect. But so long as the Greek was confined to the method of the Egyptian, he was far inferior; probably no Greek sculptor ever executed a statue involving such tremendous technical difficulties as that of Khafre, which we have already seen. At
first, indeed, the Greek imitated the Egyptian and was influenced by him, as is particularly noticeable in the matter of the left leg thrust forward as you see it in this statue. All standing Egyptian statues are thus represented, but the reason for it is a matter of too great length for us to enter upon here. Now the earliest Greek Apollos, or so-called Apollos, like that of Tenea now, in the Glyptothek at Munich, are thus represented as standing with the left foot forward, a clear evidence of Egyptian influence. And we must not forget either, that these statues which we have been studying are 2,000 years older than those earliest Apollos. But when the fine spiritual endowment of the Greek applied itself fully to sculpture, it took the superb technical equipment inherited from Egypt, and applied it to higher ends than those which had developed sculpture on the Nile. For you see that this statue before us is purely mortuary ; yet even working for these purely utilitarian ends, the Egyptian sculptor sometimes caught the spirit of his model, and we observe how he has put some of the kingliness of the monarch into the magnificent statue of Khafre, so that after all something of the soul of the proud Pharaoh has gone into the stone through the brain and the cunning hand of the sculptor, producing in some degree an ideal creation. But traces of this are rare in Egypt, and elsewhere are found chiefly in those scenes from nature which he delighted to put into the tomb chapels, where we sometimes find a loving fidelity to the beautiful world about him, and a fine sincerity, which appeal strongly to the modern heart.

Incidentally this statue offers interesting evidence of the fact that the Egyptian of to-day is physically just what he was in the days of the Pharaohs. When

Mariette discovered this figure, and it was raised from the dust and rubbish of five thousand years, the peasants employed on the excavations noticed such a striking resemblance between its features and those of the sheik of their modern village that they all cried out with one accord: "Shekh el-Beled," which means "sheik of the village." The statue has been commonly known under this name, even among archæologists, ever since.

Position 12. The body of Sethos $I$, who lived in the milllle of the fourteenth century B. C., Museum at Cairo
What would you say if you might look upon the face of King David, of Solomon, or of Josiah? But this king before us, upon whose actual features we look, almost as if he had died but yesterday, lived and reigned centuries before the Hebrew monarchy began. Sethos I was the second king of the 19th Dynasty, and his reign fell just after the middle of the 14 th century B. C. The Hebrews were toiling in Egypt then, when the utterance of these very lips was the supreme decree of the state; for his son, Ramses II, was probably the Pharaoh of the oppression. Those arms, now folded in repose, once bore the sword in triumph through the very land where the Hebrews afterward gained their home. This tall form once towered in the speeding chariot, scattering death and destruction among the Beduin kindred of the Hebrews, as they sought to invade and possess the land of Palestine. It is all depicted on the walls of the great Karnak temple, where we shall see it when we arrive at Thebes.

[^10]The Egyptians believed that such a body as this was absolutely indispensable to the future existence of the person, and we have seen that they even wrought false bodies, portrait statues in stone or wood, to take the place of this real body, should the latter ever suffer destruction. The process of preservation was easy in a country of so dry a climate, where a body buried on the margin of the desert above the reach of the Nile but without other precaution, will desiccate and after thousands of years be exhumed in an astonishingly perfect condition. When the climate was aided by artificial means, you see before you what an amazing durability was imparted to the frail body, which in other climates perishes in a comparatively short time. There were various means and processes of embalmment suited to the purses of the different families seeking the embalmer's services, and although the process was, of course, unused and unknown in the earliest times, it rapidly spread after it was once introduced, and long before Sethos I's time the practice of it had become a regular profession, demanding the services of thousands of men. In course of time, although the custom ceased in later Roman days, the tombs of Egypt became glutted with millions of such bodies. When we remember that three generations of five or six millions of people died every century, and that a large proportion of these were embalmed for probably over 3,000 years, we shall not wonder that we find large cavernous tombs with the mummies piled in like cord wood to the very ceiling. In the body of this king you can clearly see the masses of aromatic gums and the like, that have been used to fill up the interior cavities, from which the perishable organs have been removed. These latter were also preserved in four jars, which
in the tomb were placed beside the body. The top of each jar was carved in the form of a genius, to whose special protection each was committed.

Such a king was laid away in great state, wearing the splendid regalia of gold, silver and costly stones, with which he had been adorned in life. Of these things he had need in the hereafter, and they were necessarily placed in the tomb with him or actually upon his body. The result of this was that the tombs of the kings, of his nobles and officials, were systematically robbed from the earliest times, for the rich booty awaiting the successful plunderer was too tempting to be resisted. Thus we shall find that the pyramids and rock-hewn tombs, which we shall later visit, have all been completely cleared out, and in most cases the body has disappeared. The tomb of this king before us was early robbed, but the later kings, seeing their inability to protect the old royal tombs, took out many of the bodies of their ancestors and concealed them in a common hiding place, where they were discovered by the natives, and in 1881 were taken out, revealing to the astonished modern world, the faces of men who had swayed the destinies of a great nation, and held the dominant power in western Asia 3,500 years ago. When we reach Thebes, we shall see the place where these royal bodies were concealed (Position 74 ). Meantime before we leave the museum, let us at least glance at the splendid jewelry worn by these antique kings, in the days of Abraham, which proved so disastrous an appurtenance of the royal dead.

[^11]
## Position 13. The magnificent jewelry of the Phoraohs (Queen Ahhotep, seventeenth ceutury B. C.), Cairo Museum

Little wonder that the orientals of Pharaonic times could not resist such magnificent plunder as this! These luxurious adornments were found with the body of Queen Ahhotep at Thebes in 1860. She lived late in the 17 th century B. C., as Egypt was emerging from her struggle with her foreign lords, the Hyksos, the mother of whose conqueror, Ahmosis, the queen was; and although under foreign oppression, and fighting a long and exhausting war, the royal house possessed such splendid regalia as these. In the middle is a golden boat resting upon a wooden carriage with wheels of bronze. Within it are a crew of silver, while the figure of the king in the middle, the captain and steersman are of gold. Just beyond it is another boat with crew at the oars as in the first ; it is all of silver. On the right of this boat you see a small war hatchet and then a beautiful mirror of silver bronze with a handle of wood overlaid with gold. Nearer us is the magnificent battle axe of King Ahmose, which he carried only on ceremonial occasions and never actually used in battle. It is therefore gorgeously wrought; the cedar handle is overlaid with gold, the bands of costly stones; the bronze head is likewise overlaid with gold, through which ornamental figures are incised. The dagger beside it is one of the finest pieces in the case; the blade exquisitely damascened in gold on bronze, a style later taken up and copied in Mycenæan art. Here in this corner is a flexible golden chain, 36 inches long, of the finest workmanship. At each end of it is the head of a goose in gold, while pendant in the middle is a golden

[^12]scarabæus, inlaid with lapis lazuli. The large breast ornament at this end of the case is entirely of gold; at either end is a hawk's head, and the pendant bands hanging in curves from these are made up of rosettes, flowers, blossoms and heads of animals. The rectangular object propped up on a slanting card before the wheels of the boat, is a superb breast ornament or pectoral, with a gold frame and inlay of brilliantly colored costly stones. Besides these, there are bracelets of gold, beads and rings of the same metal, golden flies suspended from a chain and used as an order, or honorable decoration conferred by the king upon deserving nobles or officials. Even the remains of a fan are here, the handle being of wood wrought with gold, in which one may see the holes, where once the ostrich feathers of which it was composed were inserted. It must have been a royal spectacle indeed which the queen and the other wearers of these ornaments made, when they appeared in all the glory of such a rich display.

The workmanship of these pieces is such as no modern goldsmith need be ashamed to own, and yet they were made in the 17 th century B. C. In neighboring cases are equally splendid regalia belonging to princesses of the 12 th Dynasty, 2000 years B. C., in the days of Abraham; while near by are four bracelets found on the arm of a 1st Dynasty princess, whose body had perished, her arm having been torn off by some marauder and concealed in a niche in the wall at an early date. There it was found by Petrie. These bracelets are the earliest jewelry known and doubtless date from the middle of the fourth thousand years before Christ. No wonder that the Hebrews, little skilled in the arts and crafts, should have sent up to Phœenecia

[^13](which had by that time imported Egyptian arts) for the necessary craftsmen to make beautiful the temple at Jerusalem.

And now, as we leave the museum, let us first look at a monument, which directly refers to the Hebrews who were in Egypt at the time these splendid royal jewels before us were made.

> Position 14. The Stela of Amenophis III, re-used by Merneptah, and bearing the earliest mention of Israel; Cairo

This remarkable stela or stone tablet is for several reasons one of the most interesting monuments even in this great museum, where there is so much of unusual interest, and when you have heard its history I think you will agree with me. It is an enormous stela, hewn out of black granite, ten feet three inches high, five feet four inches wide, and thirteen inches thick. On this side it bears a long inscription of King Amenophis III, who lived at the height of Egypt's greatest power, before the downfall of the 18th Dynasty, in the middle of the 14 th century B. C. The inscription narrates the king's extensive temple buildings for the god Amon, and over the inscription you see the king twice represented as offering to the god Amon. The two figures of the king are near the outer edge, and those of the god, back to back in the middle. Curving over their heads is the winged sun-disk, and the inscriptions scattered among the figures contain the names of the king and the god, with the promises of the latter insuring the Pharaoh long life, power, health and happiness. The king erected this splendid monument in his mortuary temple on the west shore of the Nile at

Thebes, behind the great colossi of the plain, which we shall visit there (Position 64).
When his son, Amenophis IV, or Ikhnaton, introduced a new religion and attempted to exterminate the worship of Amon, he sent his craftsmen all over the land erasing the name of Amon wherever they could find it, and destroying all monuments erected in honor of the hated god. These workmen found this stela in the temple of the king's father behind the colossi, and they chiseled away the figures of Amon in the middle, as well as almost the entire inscription below, because it recorded the temples built in Amon's honor by the king's father, whose own figure, however, they respected. The splendid monument was thus destroyed.

But again, after the fall and death of the Amonhating Ikhnaton, Sethos I, who followed him after an interval, sent his craftsmen about the country restoring the monuments which had been defaced during the reform. His workmen, therefore, finding this defaced stela in the temple of Amenophis III, carefully recut all that had been erased, sufficient traces remaining in most cases so that they could follow them with the chisel. That dark lower portion at the bottom was untouched by Ikhnaton's destroyers, and those are the hieroglyphs of Amenophis III's original inscription, but the lighter portions above are the recutting of Sethos I. Between the two Amon figures, in the middle at the top, Sethos I has inscribed a short record of his restoration, in that prominent vertical column of hieroglyphs. It reads: "Restoration of the monument, which King Sethos I made, for his father Amon-Re, king of gods."

This, then, was the pious work of the king whose face you have just looked upon. But under his grandson, Merneptah, the temple which guarded this stela fell on evil days; for, following the example of his father, Sethos I's son Ramses II, Merneptah began demolishing the temples of his great predecessors, in order to obtain building materials for his own works. He razed the temple containing this stela to the ground, and upon discovering the stela immediately appropriated it for his own mortuary temple but a few hundred feet away. Placing it with this inscribed face to the wall, he inscribed upon its unoccupied back a triumphant inscription of twenty-eight lines, recording his victory over the Libyans in the fifth year of his reign. The last three lines of the inscription, his court flatterers devoted to a song of victory, in which the singer, sweeping the whole northern horizon from west to east, exults in the power of the king over the nations, as he enumerates them one by one. As he reaches Palestine he says:
"Israel is desolated; his grain is not, Palestine has become as widows for Egypt." This is the earliest mention of the Hebrews (their own literature being much later), and indicates that at least part of the people were at this time in Palestine. Thus we gain from this inscription a swift and uncertain glimpse of the Israelites suffering from the Pharaoh's power in Palestine, before they appear as a nation there in the Old Testament, but it does not settle the vexed question of the date of the Hebrew exodus.

But we cannot wander further through these halls; the land about us lies more thickly strewn with mighty ruins than does any other land in all the world, and to these we must now devote ourselves, incidentally seeing
as much as we can of the life of the present-day Egyptians. We had a view of the pyramids across the domes and minarets of this city (Position 4, page 69), bu:t we must now visit them and view them at close range. This will carry us out of the town and across the Nile bridge, which is but a step from this museum. Let us therefore proceed to the bridge and enjoy our first view of the Nile and its shipping, on our way to the pyramids. Find on Map 4 the red lines numbered 15 on the west side of Cairo, which show our next standpoint and the direction in which we are to be lookingnorthwest.

Position 15. The great Nile Bridge at Cairo open for the passuge of the daily fleet of cargo boats
Every day at noon this long bridge over the river is opened to permit the passage of the accumulated fleet, and as they pass, we are here taking our first view of the life-stream of Egypt. On our right is the city, now quite out of our field of vision; before us and on our left is the river, down which we look northwestward for a long vista, and a still more distant point may be discerned through the bridge itself, now turned on the right. As soon as the bridge is opened, the craft from up river pass quickly through by force of the current alone, only raising their canvas after they have cleared the bridge. Then we see the sails of the fleet from below beating back and forth across the current, maneuvering for position as at a yacht race, until, when the right point is reached, they make a dash for the draw. The picturesque triangular sails cross and recross like a flock of white-winged gulls at sea; their firm lines are sharply defined against the

[^14]deep green of the palms on the further shore; the bright sun casts a golden glow over the whole scene, and the bluest of blue skies smiles overhead. The cargo of these rude craft is garden produce, grain, pottery, brick, sugar-cane, sometimes live stock, etc. They once carried all the produce of Egypt, but since the construction of the railway, and the introduction of the steamboat, their traffic has been much diminished. They are, however, not less picturesque than they were before, and it is among the chief delights of the visitor to Egypt, to watch the sails upon the Nile. They stir the imagination not less than the hoary monuments distributed along the river, which has done so much for this land, the child of the Nile. For thousands of years it has carried the traffic of millions of people in craft like these, although these are but pigmies compared with the splendid barges of the Pharaohs. Ramses III tells of a sacred barge which he built for the Karnak temple at Thebes, which was no less than 224 feet long, and we shall later see the obelisk of Thutmosis I, which was brought down from the first cataract in a boat 200 feet long and one-third as wide. The first of these craft was built in the 12 th century B. C., and the second in the 16 th.

This long boat moored to the pier of the bridge, is a floating dock for steamboat passengers, for the steamboat is now an every-day sight upon this ancient river. We, however, shall not employ a steamer for our voyage up the river; we shall go in a sailboat rigged like these, but with comfortable cabin arrangements, of which we shall say more when we have seen one.

As soon as this bridge has closed we shall cross to the further shore, where you see the green palms be-
hind the sails. They are on the island of Bulak (Map 4), and just behind the first sail on the left of the bridge you may catch a glimpse of the Gezireh Palace Hotel, which we saw from the citadel. We shall, however, turn away from the palms before the hotel, and proceeding to the left, through others just as picturesque, we shall cross to the west side of the river and go southward; then westward toward the distant desert plateau, which we saw from the east side of Cairo, when we first arrived (Position 4). As we leave the Nile the pyramids will suddenly loom upon the western horizon. There we shall stop and study them from afar. You should trace this route upon Map 4 to the point where the next stop is to be made. You will notice that the pyramids are about seven miles southwest of Cairo. Our next position is shown by the red lines numbered 16 . We shall be looking southwest.

## Position 16. The road to the Pyramids, westward toward Gizeh

The gay and motley array of the Cairo streets, with their thousand cries and the hum of the particolored bazaars-all this is behind us. We stand far out in the rich verdure of the Nile bottoms, and with Cairo at our backs, we look southwestward across the level, and there boldly breaking the skyline are those venerable forms of which we have so often dreamed, the pyramids of Gizeh. We saw them, to be sure, from the heights east of Cairo; but from there they barely glimmered above the misty horizon-line. Here they stand out for the first time in all their proud defiance, bidding time do his worst. What a rush of memories the first glimpse of them evokes! But let us disregard

[^15]these for a moment; we shall have ample time for them before we have done with Gizeh, and at this point much practical information is necessary.

On our right stretches away toward the desert the high road to the pyramids. It is literally a "high road," for were it not so raised upon an embankment, there would be no communication between Cairo and the pyramids in the time of the inundation, save by boat; and the natives would be unable to reach the markets of the town. The beautiful lebbek trees which line the road on either hand, planted by Ismail Pacha, make the ride to the pyramids shaded and delightful, in a land where shade is a rarity and the sun beats down with fierce and almost vertical rays. These trees attain a height of 80 feet in forty years, and spread far and wide, casting more shade than any other tree. Beside the road flows one of the innumerable irrigation canals, which we shall later view from the summit of the Great Pyramid out yonder, where we shall command a wide view of the broad Nile flats, which stretch away from the road on our either hand, and be able to follow them with our eyes to the dim horizon, where Cairo lies behind us. You notice how the plain abruptly terminates out by the foot of the pyramids. That sandy slope which leads up to their bases, is a wind-borne invasion from the Sahara desert, known in classic times as the Libyan Desert, on the margin of which the pyramids stand. Those sands cover the limestone cliffs of the Nile cañon; but the cliffs are here much lower than those which we shall find higher up the river. They are here dropping gradually to the level of the one-time shores of that great prehistoric bay, which the Nile has now filled with soil and transformed into the Delta, for this richest triangle of soil
in the world begins just here on our right, north of the road. At the foot of the bluff on our extreme left, you discern the houses of the modern village of Kafr.

Little do the peasants who dwell in the village dream of the life which once teemed and swarmed in busy streets, occupying these very fields before us, which they now turn with wooden plows. For here lay the residence city of the 4th Dynasty, the royal residence of the splendid Pharaohs who built the pyramids before us. For perhaps two hundred years it was the seat of government for this great people, and here lived the man at whose will the mightiest mass of masonry ever wrought by human hands was reared. Now all that remains of the city is a scanty remnant of the wall, rising here and there from the shrouding sands, which have protected it from the peasant's plow. When that city was laid out, nearly 3000 years before Christ, the jutting desert headland yonder, now occupied by the pyramids, was a bare waste of sand. The Egyptian always loved to lay his dead where his great sun-god died and went to rest, shrouded in the glory of the desert sunset with every closing day. Hence as we ascend the river, we shall find almost all the cemeteries on the west side, in the cliffs which formed the Egyptian's western horizon, behind which the sun dropped every night. Thus this stretch of desert, upon which we are looking, being immediately on the west of the now vanished city, naturally became its cemetery. But it is not impossible that the first Pharaoh of the Dynasty, having selected this desert headland as the site of his pyramid, located his residence city at this place also, in order that he might always be able personally to inspect the progress of the mighty monument. which was to be his eternal resting place.

[^16]Thus there grew up here a great cemetery, where five or six generations of people were laid away, and as the nucleus of it all, rose the vast pyramids which we see before us. The first and most prominent of the group is the earliest, and two others retreating in order of decreasing size as well as age, extend southwestward in a line through the diagonal of the first (Map 5). At the foot of the first there are three small pyramids, which you are here viewing at such an angle, that they appear to be at the base of the second pyramid; while at the foot of the third pyramid there are three more small ones, of which you can see only one, at the extreme left of the group. The largest three, called for convenience, as we have already done, the first, second and third pyramids, are the tombs of three kings of the 4 th Dynasty, the first being Khufu, the second Khafre, and the third Menkewre (Map 5). The Greeks, hearing these names some 2,500 years later, corrupted them into Kheops, Khefren, and Mykerinos or Menkheres. The modern successor of these hoary monarchs of the Nile valley has invaded their ancient cemetery and erected a vice-regal kiosque, which you see at the northeast corner (the corner nearest us) of the first pyramid.

Now note the relative location of these pyramids on Map 5. If you will turn its upper right-hand corner toward you and push the map slightly away from you as you look, you will be occupying to it about the same relative position which we occupy in this view facing the west, with the three pyramids retreating in order of decreasing size and age toward the southwest. Notice at the extreme north (right) of the map the termination of the road from Cairo, on which we stood, with the

Mena House Hotel just at the beginning of the bend toward the first pyramid. That road, the three pyramids and the Arabian village (Kafr), will locate you closely. Look also at Map 4 again where the red V (16) shows exactly the extent of the prospect we have just viewed. Returning to Map 5, trace our coming itinerary of the cemetery. Having left the road, we shall view the first pyramid from a point south-southeast of it (Position 17) ; we shall then view it from the northwest (Position 18) ; then look up the northeast corner (Position 19) ; then climb it for a view toward Cairo (Position 20), and of the second pyramid (Position 21) ; and after a view down the southwest corner (Position 22), we shall descend and approach the entrance on the north side (Position 23), before entering and viewing the grand gallery (Position 24: see plan of the Great Pyramid, page 129). Finally we shall inspect the granite sarcophagus of King Khufu (Position 25 : see plan of the Great Pyramid, page 129), the so-called temple by the Sphinx (Position 26) and the Sphinx itself (Position 27).

But before we leave this road (Position 16) look out again toward the desert and see how the plateau slopes to the south (left) above the village of Kafr. That slope drops into a valley just out of our range of vision on the left, and it is from that valley that we are now to view the great pyramid, crossing to reach it, a bridge over the canal. Note on Map 5 the red lines numbered 17 which give this next position and the range and direction of our vision.

## Position 17. The Great Pyramid of Gizeh, a tomb of 5,000 years ago, from the southeast

With Cairo on our right and Memphis behind us, we look north-northwestward to the great Pyramid. We stand for the first time on the desert sands. These chattering boys, who clamorously offer us the backs of their camels for a ride over to the Sphinx yonder, will not contribute greatly to the meditative frame of mind, which overtakes one in the presence of such impressive monuments. Behind us, but not within our prospect is a stretch of the ancient wall of the city (see Map 5), which was the royal residence of the king who built yonder gigantic tomb. The three small pyramids beside it probably belong to members of his family, for Herodotus says that the middle one was the tomb of the daughter of Khufu. In a line with these, but nearer to us, rises the gloomy head of the Sphinx, gazing into the rising sun and guarding this city of the dead as he has done these five thousand years perhaps. At the left are the palm-shaded graves of the Moslems, the modern descendants of the very men who inhabited the vanished city that once rose around us. This contrast between the humble sepulchers of the men of yesterday and the vast tombs of their ancestors, is one which is symbolical of the fallen fortunes of the present-day Egyptians, and one which will meet us very often in our voyage up the river.

How much lies between these humble tombs of yesterday and that hoary pyramid! Already to the ancient Greeks it was one of the marvelous survivors of antiquity, which they involuntarily placed among the seven wonders of the world; and although all the others of the seven have passed away and for the most part left no trace, this wonder of all ages still stands-
stands as it had stood for some eight hundred years, when Abraham looked across upon it from his Delta pastures; stands as it had done for fifteen hundred years, when the prophet of the Hebrew Exodus led forth his people. It saw the sword sink from the impotent hand of decadent Pharaohs, till six hundred years later it beheld the fierce soldiery of Assyria scattering ruin and desolation at its feet and plundering glorious Thebes; two centuries more and it beheld the Persian host pouring in through the isthmus like a flood and repeating that desolation; two hundred years later it saw the triumphant entry of Alexander, as he marched beyond it to worship at the desert shrine of Amon; three centuries more and it beheld the legions of Rome, stationed from end to end of this valley and bringing in the new order of the imperial city; seven hundred years more and it saw the wild hordes of Arabia, surging in across the Delta plain, with the breath of the desert hot upon their lips as they brought to the children of the Nile the language and the religion of Mohammed; nine centuries later it saw the baleful gleam of the star and crescent rising in the isthmus and heralding the oppression and misrule that have ever followed the footprints of the Turk; three hundred years more and it shadowed Napoleon as he stood there at its feet, calling upon the soldiers of France to remember the centuries that looked down upon them; and within the memory of almost all who look upon it now, it heard the crack of the British rifles at Tell-el-Kebir. The whole world-drama from the dawning of the ages until now, has been enacted at its feet; the centuries have clustered like little children around its hoary knees, and it still stands and it is still the wonder of the world.

[^17]These are the thoughts of every one who visits this monument to-day; they are commonplace, but who can help renewing them as we stand in the presence of a structure which has lived through the whole span of the historic centuries, to tell of the power and civilization, which prevailed in the days that brought it forth. It has indeed much to tell us, and we must begin its study up on the plateau from which it rises, at the northwest corner, the one diagonally opposite that which is now nearest to us. We are now about 700 feet from its base; our next position will be little over 100 feet. We shall be near enough to see the courses of stone.

## Position 18. King Khufu's tomb, the Great Pyramid of Gizeh, and the sepulchers of his nobles, from the northwest

Here we are standing at a point of view, the diametrical opposite of that which we occupied at Position 17 (Map 5). We are looking at the northwest corner of the great pyramid, with Cairo on our left and Memphis in our front, behind the pyramid. The mass of the vast pile begins to grow and we are ready to credit Herodotus' statement that its erection consumed the labor of 100,000 men for twenty years. At the other corner, from which we have just come, we were able to contrast this tomb of Khufu with those of his modern descendants; here we may draw a similar contrast between his and those of his contemporaries, whose low and unpretentious tombs we see close to the pyramid on our right. These are but a few of the many masonry structures erected in this cemetery by the nobles and officials of Khufu, who lived at his court and carried on the practical administration of his realm. Here
lie military commanders, mining and building engineers, architects, chief treasurers and chancellors of the exchequer, judges and chief justices, viziers and prime ministers, all of whom lived and flourished in that vanished world, and never dreamed of the day when not only their civilization, but even their language should be extinct and forgotten, only to be revived again by the labor of whole generations of scholars.

In one of these tombs lies, or rather once lay. Khufu-onekh, the architect who built this great pyramid, and the massive granite sarcophagus in which his coffin was deposited is now in the museum, which we visited in Cairo.

These masonry tombs themselves look like truncated pyramids, for the exterior of the wall slants inward, or, as the architect would say, has an inward batter of about $75^{\circ}$; this is a much steeper slant than that of the pyramids, which is usually about $52^{\circ}$. They are rectangular, with the longest dimension in a north and south line, and with their flat roofs, they so remind the natives of the benches or terraces in their own modern courts and bazaars, that they call them by the same name, that is, "mastaba," a bench or terrace.

These mastabas are not solid masonry, as you would suppose in looking at then here; but this solid exterior is only a revetment of masonry, covering and holding in place a core of loose sand and rubble. In the east front there is a door giving access to a chamber, where the deceased was supposed to live, and to enjoy the offerings of food, drink and clothing necessary for his subsistence, which his surviving relatives placed there for him. The walls of this chamber, which we may call the chapel, were sculptured with beautiful relief
scenes, representing the deceased and his servants and slaves, engaged in all those employments which had occupied them in life: plowing, sowing, reaping, hunting, fishing, cattle-herding, poultry-raising, the work of the craftsmen in metal, stone, wood, ivory, leather, etc. Potent charms were pronounced over these scenes by the mortuary priests, and it was thought that long after the relatives of the deceased had passed on to join him, and could no longer bring offerings to the chapel, these scenes would be as effective as the realities which they represent, in producing for him all the necessities, as well as furnishing him all the pastimes and diversions, to which an Egyptian gentleman was accustomed. These relief-scenes now furnish us with almost all that we know regarding the life of this remote period, and afford a fuller and more complete picture than is available for any other people at so remote an age.

On the west wall of these chapel chambers is the false door, which we noticed in the Cairo Museum (Position 10); the entrance through which the dead passed in gaining access to the chapel. Beside this chapel chamber, and connected with it or with the outer world at most by a small tubular orifice, or a mere slit in the masonry, is a second chamber, intended to serve as a secret repository for the portrait statue of the deceased, of which we saw some of the best specimens at the museum in Cairo (Positions 10 and 11). Thus only the false body of the dead was concealed in this superstructure of masonry; the real body, the mummy, lies far down in a chamber hewn in the heart of the native rock beneath the superstructure. This sepulcher chamber is reached by a shaft, which, passing down through the masonry vertically into the rock be-
neath, is sometimes eighty or ninety feet deep, but usually much less. Down this shaft the mummy was lowered on the day of burial, to the sepulcher chamber in which the shaft terminates, and once safely deposited there, the chamber was walled up and the entire shaft was filled to the top with sand, rubble and mortar. Yet nearly all the shafts of this cemetery have been cleared out and the chambers robbed in antiquity, for the sake of the ornaments, jewelry and often valuable mortuary furniture, with which such a departed noble was supplied.

You will see that these tombs embody the beliefs of the Egyptian regarding the hereafter; while not all his notions of the future life can thus find expression in stone and mortar, several of his fundamental conceptions concerning it are here brought out, especially the idea that the tomb was the dwellingplace of the dead, or as the Egyptian called it, his "eternal house."
The essential parts which we have described in the mastaba, we shall expect to find likewise in the pyramid, though the different form of the pyramid necessitates some modification in their arrangement. Thus it is impossible for the shaft leading to the sepulcher-chamber to pass down through the top of the pyramid; hence it is there an inclined passage, and if you will look along the north side of this first pyramid you will discern on our extreme left a rough depression in the face of the masonry. There is the entrance to the inclined passage leading into the pyramid, and there we shall later enter.

But first we must pass over these heaps of masonry, along this north face of the pyramid, past the rough opening, to the northeast corner, where we shall find

[^18]many questions to engage us before we make the ascent of the pyramid, after which we shall enter it. Standing at the very corner of the pyramid we shall first throw back our heads and look toward its summit. We shall be near enough almost to touch the stone. This position is given on Map 5 by the red lines numbered 19.

## Position 19. Looking up the mortheast corner of the Great Pyramid, where the tourists ascend. (Raise the instrument and look upward)

Who but the visitor at these pyramids could have conceived that the hand of man had ever reared such a mass of masonry as this! Here we stand looking up the northeast corner; we face southwestward, and our line of vision coincides with the diagonal which runs southwestward through the pyramid group. Here the vast mass has full sway over us; it overpowers and overwhelms us. It has sometimes been flippantly said that several modern buildings have surpassed it in height ; yet how puny appear the one or two slender spires referred to beside this gigantic mass of solid masonry towering its enormous bulk well-nigh five hundred feet into the blue. See how the great blocks dwindle and dwindle as the eye soars upward and follows them until they merge and melt into the mountainous bulk of the mass; and still it rises ever higher, to the distant peak where the Arab waving his black garment seems like a tiny insect, or a lofty bird, soon to be enveloped in that fleecy cloud, which floats in from the west. What an answer to Sir Thomas Browne's contemptuous remark upon the builder of this pile: "To be but pyramidally extant is a fallacy of duration!"

Here is the very embodiment and potentiality of that ancient state of which the Pharaoh was the soul. Think of the organization of men and means, of force and skilled labor required to quarry these $2,300,000$ blocks, each weighing about two and a half tons, to transport them across the Nile and lift them to the rising courses of this ever-growing monster, till the cap-stone is 481 feet from the pavement. The base of the sea of stone which forms each face is 755 feet long, and the square which it forms on the ground includes a field of over thirteen acres. When you have walked around it yout have gone over 3,000 feet, some three-fifths of a mile. And in spite of the fact that a rise of ground on the spot where the pyramid stands, did not permit the engineer, who laid out the ground plan, to see his stakes from one corner to the other, but forced him to measure up and then down again, the error in the length of the sides of this square base is but sixty-five one-hundredths of an inch; and the error of angle at the corners is but one three-hundredth part of a degree ( $00^{\circ}-00^{\prime}-12^{\prime \prime}$ ). This far exceeds the accuracy of such masses of masonry in modern times, for although it may be quite within his power, the modern engineer finds no occasion for producing such work. It is accurately oriented to the cardinal points. But the structure before us is not the only witness to the amount and character of the labor put into it, for the engineers of the time have shot over the face of the bluff of the plain below, a mass of waste chips from the cutting and facing of these blocks, which equals fully half the bulk of the pyramid itself.

Perhaps you are saying to yourself that this masonry looks rather rough in exterior finish to be the product of skilled workmen. Quite true, but as you have
doubtless surmised, this was not originally the final exterior finish. When completed the pyramid was sheathed from summit to base in magnificent casing masonry, so skilfully set that the joints were almost undiscernible. Vast smooth surfaces then greeted the eye from base to summit. Later on we shall see a very striking demonstration of the cunning with which this work on the casing was executed. It was still in place when the first Greek visitors beheld the pyramid and wrote of it. Occasional references through classic times, and after the Moslem conquest, show that the casing was still in place until the 13 th century A. D. Then all mention of it ceases until the 16 th century, when an Italian traveler refers to the pyramid in such a way as to show that the casing has now disappeared. It was removed then some time between the 13 th and the 16 th century by the Moslem builders of Cairo, who used the blocks thus gained for building the mosques and tombs and houses there. You viewed from the citadel the mosque of Sultan Hasan, into which some of them went, in the 14th century (Page 60 ). Thus the beautiful Saracen structures of Cairo grew up at the expense of this older monument of the country. Some of the casing blocks in the lower courses were covered up by the accumulations of detritus from above, and thus' escaped the crow-bars of these Moslem vandals; thus part of the lowermost course is still in position in the centre of the north side. But this quarrying has cost this pyramid some 30 feet of its height, and 15 or 20 feet in the length of its sides.

Perhaps this loss is not so felt by the tourist as by the archæologist, for the former finds compensation in the fact that he may now ascend the pyramid,
which would have been quite impossible had not the smooth casing masonry been removed and the terraced courses below revealed. To be sure they do not form the most comfortable stair-case in the world, for as you will note by looking at the native nearest us, some of them are nearly shoulder high; but by dint of sundry pulling in front and pushing from behind at the hands of the willing Arabs, we shall be able to make the ascent with plenty of stopping to rest, within a half hour.

Our next position then is to be on that lofty summit, and from it we shall look practically east, that is, to our left, over the full width of the Nile valley. Find the red lines numbered 20 marking out the field of vision on Map 5, but especially on Map 4.

## Position 20. View from the summit of the Great Pyramid, enst over the valley of the Nile

At last we are here! And the first thought is doubt and questioning. Is it possible that we stand at last upon the summit of the venerable monument of which we have so long dreamed? But look out there upon this fertile valley, green and smiling under the brightest of blue skies; then drop your eyes upon this dead stretch of sand at our feet. Nowhere but upon the summit of this great pyramid is there such a prospect of the most prodigal and unlimited wealth of life, to be viewed from the very heart of death. Before us, as far as the eye can penetrate and distinguish, there is this wide expanse of fertile bottom, teeming with the thousand elements of life; while behind us and on either hand are the silence and death of the desert. What a land of contrasts!-contrasts between the ancient and

[^19]modern condition of the nation ; contrasts between natural conditions side by side. You stand out there almost anywhere, with one foot in the desert sands and the other buried in verdure. I have a photograph taken there, of a donkey standing with forelegs in the grass, and with hind legs in the desert.

We are looking just a little south of eastward, directly across the Nile valley, here above the southern apex of the Delta. The Delta, therefore, stretches away northward and northeastward on our left (out of our range of vision at present) till it meets the Mediterranean; and over on the horizon line are the cliffs which mark the other side, the east side of the valley. They rise to the Arabian desert, which extends in rolling desolate hills to the Red Sea beyond. Just out of range on our left, at the foot of those distant cliffs, is Cairo (see the red lines numbered 20 on Map 4 ), behind which we stood and looked over to these pyramids. Leading to the city, but also out of our field at the moment, is the road shaded with its long double line of lebbek trees, along which we came out here from Cairo. On our right the margin of the desert winds southward in a sinuous line, as you see it beginning just at our feet by the side of that town, till it passes Memphis eleven miles south of us. Behind us the Sahara in a waste of billowy hills rolls on to the Atlantic two thousand miles away. It is our first clear and unobstructed view of the valley from cliff to cliff, and you will find it profitable to stop here and ponder long and well our exact location and its relation with other important and main points.

Out there barely visible upon the skyline we have already noted the cliffs on the eastern side of the Nile; the river itself is that broad white line just under the
horizon coming into view at about the middle of our present prospect and running out of range at the left. It is the river and those cliffs yonder which made possible the great pyramid. For the cliffs furnished a limestone of the finest quality and the river at high water made its transportation possible to the very foot of the bluff below us, where a huge causeway led up here to the pyramid, directly through the ground where this village now stands. Up the causeway, of which large remains are still surviving, the stone was dragged to the desert plateau. The village now built over the causeway is Kafr, which you will remember, we saw from the road to the pyramids, in our first view of them (Position 16). Later we shall visit those distant quarries and see the vast halls and galleries, from which the great pyramid was taken.

The amnual inundation which floated the heavy barges, laden with the massive blocks, has, as you see here, fallen, and left pools and patches of water here and there. Everywhere the retreating waters have left a deposit of rich mud from the highlands of Abyssinia, which in large measure explains the marvelous productivity of these fields. The rise of the waters is already observable in June at the first cataract, though not here in Lower Egypt. By the first of August it is considerable, but the increase continues to the latter half of September, when, after maintaining a constant level for twenty or thirty days, the waters again rise, till by the middle of October they have reached the maximum level. At this time, the whole country before us may be flooded; for example, in the autumn of 1894, I saw this district, especially looking northward and northeastward from our present station, so flooded that it looked like a vast inland sea. Its glistening sur-

[^20]face was flecked here and there with palm groves, marking the villages; but these, like Kum el-Aswad yonder, although surrounded by water, are upon higher ground. Ordinarily they are beyond the reach of the water, but in 1894, thousands of natives were driven from their homes by the flood and forced to seek refuge on the neighboring highlands, till the subsidence began. This is already in full course by December; the fields now gradually dry up, as you see them doing at our feet, the pools disappear and the peasant is dependent for irrigation upon the waters stored in reservoirs kept in repair for the purpose, and the vast network of canals, which ramify throughout the country, like a life-giving arterial system. The government supervision of this system is necessarily close and effective, as it was in ancient Egypt. At the second cataract are rock inscriptions of the 12 th Dynasty (19th century B. C.), marking the maximum height of the flood, in order that comparison might be made from year to year and the water properly distributed and used. At present the vertical rise of the waters from lowest to highest is usually about 49 feet at the first cataract, at Thebes it is 38 feet, while here at Cairo it is about 25 feet and in the Delta still less.

The husbanding of these waters began in prehistoric times; and by 2000 B. C. vast government works were constructed for storing them for future use, as we shall see when we have visited the Fayum. In modern times, after much mediæval neglect by the Moslems, a huge dam has been built at the southern apex of the Delta, usually known as the "barrage." The English have recently built another at Assiut, and still another at the first cataract, the last being the largest dam in the world. Indeed the English are at present developing
these resources of the Nile inundation with unprecedented success, though not without disregard of the nation's inheritance in its ancient monuments, as we shall see, when we have reached Philæ. But when we remember that the only rain which the country can receive is from those rare cyclonic storms, which force rain-bearing clouds from the Mediterranean southeastward across the Sahara into the Nile valley, we shall understand the necessity for utilizing the life-giving Nile to the utmost. I have met children in Upper Egypt, fifteen years of age, who have never seen a heavy rain; at the same time, slight showers have been known to fall at Thebes, several years in succession, and Petrie's mud-brick excavators' quarters were one season almost washed down by a forty-eight-hour rain. When we have begun our trip up the river, we shall see how the natives employ the waters, which are thus husbanded for them by the government.

Let us now turn about, toward our right, nearly if not quite one-third of a complete circle. This present prospect will then be behind us and on our left; while the second pyramid, now behind us on our right, will be directly before us. Find the red lines numbered 21 on Map 5.

Position 21. The Second Pyramid with its crown of original casing masonry, southwest from the summit of the Great Pyramid

We stand looking southwestward toward the heart of Africa, with Cairo almost behind us and Memphis on our left. Before us looms the second pyramid, completely hiding the third and smallest, which lies behind it. This is probably not the best point of view from

[^21]which to be impressed with its size, and yet when you remember that yonder cap of casing masonry which still crowns it, extends for 150 feet down its sides, this may serve as a scale by which to measure the rest; but lifted as we are upon the shoulders of the great pyramid, we are taking an unfair advantage in thus looking down upon its slightly smaller neighbor. But how splendidly it rises against that background of billowy desert, which stretches away southward.

Here, and a little to the east (left) of our present range of vision, is the northern extremity of a line of pyramids distributed in groups extending some sixty miles in length, from the pyramid of Illahun in the south, to the ruinous group of Abu Roâsh just behind us here on the north of the Gizeh group. This sixty-mile line of pyramids represents a line of Pharaohs, who reigned over a thousand years. We shall view the southern end of this line later on, and stand as it were, at the other end of that thousand years (Position 34 ) ; for, speaking roughly, it begins at the north, proceeds southward and ends at the southern termination of the line.

Peeping out from behind the second pyramid you see one of those small ones, which stand at the base of the third pyramid (see Map 5). Further east (left), but nearer to us, you observe three low sand-covered walls, two extending eastward, and one at right angles to these. The nearer of the two parallel walls is part of the enclosure wall surrounding the second pyramid; that at right angles to it, is part of a similar wall enclosing the third pyramid; while the further of the two parallel walls is really not a wall at all, but the upper end of the causeway leading from the plain to the desert plateau and the third pyra-
mid, up which the material for it was transported, and by means of which, after the king's death, access was gained to the temple of the pyramid, where his mortuary ritual was regularly carried on by an endowed priesthood. Do you remember the mastaba tombs which we saw down yonder near the base of this pyramid on which we stand? Do you recollect that we called attention to the fact that these mastaba tombs have on the east side a chapel chamber where the deceased lived, ate, drank and was clothed?

Follow that causeway out there (what we called the further parallel wall) westward (to the right), and as your eye approaches the second pyramid, you notice just on this side of the tiny pyramid, a small heap of ruins. Those ruins are all that remains of the chapel belonging to the third pyramid, now just out of range behind the second. Like the chapel of the mastaba, it is on the east side of the pyramid to which it belongs, but as the king naturally demands a more pretentious chapel than that of his nobles, it becomes a temple, detached from the pyramid. You will see this still more clearly if you look at the ruins here at the extreme left, more at our feet, over this standing native's head. These are the remains of the temple of the second pyramid, and it stands, as you see, on the east front of the pyramid (see Map 5). There in that desolate sand-covered ruin, once a splendid sanctuary, an endowed priesthood carried on the ritual and worship of the dead Khafre, who lay in the pyramid; and there from the foundations established by the king for the purpose, he daily received the offerings of food and drink, which were to maintain him in the hereafter. Two thousand years after these kings of the Old Kingdom have passed away, we still find priests

[^22]of their cult, though the fortunes of their temples had by that time fallen very low.

The pyramid before us lacked nine feet of being as high as that one on which we stand; it was 472 feet high, but as it has lost but a trifle at its summit, while the first pyramid has lost thirty feet, and as it also stands upon higher ground, we look up to its peak even from the top of the great pyramid. The length of each side is 706 feet, yet despite its vast mass, when Belzoni opened it on March 2nd, 1818, he found that it had been robbed in antiquity and the body had disappeared. The futility of all this enormous expense of human labor and of human skill in the vain attempt to preserve the body and thus secure immortality for the spirit, is as depressing as that illimitable sweep of barren desert, that stretches away from the pyramid at our feet till it is lost on the distant horizon. It forms a fitting background for the silent pyramid in which both the body and the hope of Khafre were entombed.

We must now turn to the right and from the same point where we now stand look down the southwest corner of this pyramid to the summit of which we have climbed. On Map 5 the red lines numbered 22 show what our field of vision will be.

## Position 22. Looking down the southwest comer of the Great Pyramid upon the mastabas of Khufu's lords

We are now looking down the corner diagonally opposite the corner up which we looked before we ascended the pyramid. We are not here so impressed with the size of the pyramid as when we looked up, for the reason that the converging lines which in per-
spective produce the effect of distance, are here inverted as the great mass of the pyramid swells out beneath us. And yet if you will (lowering the instrument until you are looking toward the floor) let your eyes run down the precipitous sides nearly 500 feet to the desert below you will be ready to shrink back, I doubt not, at the suggestion of falling. One shudders at the thought of that white-robed native plunging from his dizzy height over the stone beneath. How insignificant that camel looks far down there on the sand.

However, we are looking down here chiefly to observe those mastabas on the right. Do you see how the central core of sand and rubble is held in place by the retaining wall of surrounding masonry? Does it occur to you that there was a time when that retaining wall was just a rude circle of unhewn boulders, gathered by primitive man around the sand-heap that marked the resting-place of his departed ancestor, to protect it from the drifting winds? Such it certainly once was, and you may see many a sand-heap on the margin of the desert here, marking the grave of the peasant of yesterday, with just a rude oval of hastily gathered stones about it, lest it should vanish in the drifting sands. Now, as the mastaba has grown out of the sand-heap, so the pyramid has grown out of the mastaba, by placing one mastaba upon another and thus building a terraced pile diminishing as it rose, each mastaba being smaller than the one beneath it. Finally, in course of time, these terraced sides were filled out in one plane slope and thus at last the pyramid form was attained. When we go to Sakkara we shall see one of the terraced structures (Position 29), which form the transitional stage betwern the mastaba and the pyramid.

[^23]Since we first saw this pyramid we have once paused to think of all the long course of man's career that lies between us and its builders-but have we stopped to think of the long and marvelous development that lies behind the era of the pyramids? Remote as is this hoary monument, we may look behind it, down a still remoter vista of man's past development: at its hither end is the pyramid upon which we stand, then the massive mastaba down there, out of which the pyramid grew; and yet back of this, in the dim ages of the forgotten world, is the sand-heap grave. Here, the pyramid, the most tremendous feat of engineering achieved by ancient man; and yonder as its lineal ancestor, the lowly sand-heap that covers the body of the peasant plowman. This is evolution as the archæologist sees it-not merely the law of the development of physiological forms, but also of human arts and human institutions. For what an evolution is here! Not alone in the mechanical arts, which, beginning with the sand-heap, have finally achieved the pyramid; but also in the organization of society and of government, which, developing in the thousand years that lie between the sand-heap and the pyramid, have gradually passed from the feeble initiative of the individual to that of a highly organized state, so efficient that it is able to concentrate all its vast resources of wealth, of labor and of skill upon one supreme achievement, never later to be surpassed. Thus a whole stage of human progress lies behind this pyramid, and is to be traced in the monuments which are visible from its summit.

But we shall not have learned all that this monument has to tell us, till we have entered it, and
we must now descend for that purpose. The entrance to which we now go was seen, you remember, in the north side from our Position 18. The standpoint we are about to take before that entrance is given on Map 5 by the red lines numbered 23 .

## Position 23. The entrance to the Great Pyramid, the sepulcher of Khufu (in morth face), seen from below

Mounted upon the accumulated débris in the middle of the north face of the great pyramid, we are looking up at the opening. Is it possible, you are asking, that the Pharaohs thus advertised the entrances to their tombs and invited the tomb robber in this way to the place where he might gain access to the treasures of the interior? The recollection of the now vanished casing will immediately answer this question. What we see here is but the wreck of the ancient opening, which, piercing the casing just fifty-five feet and seven inches above the pavement, was so cunningly closed by a single flat slab of stone let into the surface, that it was invisible from below. Add to this the fact that it was not in the middle of this face of the pyramid, but twenty-four feet east of the middle, and we shall understand how baffling it must have been for the tomb robbers. Nevertheless, they somehow gained a knowledge of it, and the entrance was known in the time of Christ. In any case, Strabo speaks of a movable stone, which closed the entrance to the pyramid. This shows that it had already been robbed in antiquity, but it was later closed again and all knowledge of the entrance lost.

That movable stone gave access to a descending passage only three and a half feet wide by four
feet high, and protected from the enormous pressure from above by a superimposed peak of huge blocks of limestone, which you see in the rough opening above us. This passage points to the pole-star, and descending, rapidly passes out of the superstructure of masonry into the native rock beneath, upon which the pyramid rests, and after 345 feet terminates in a "sub-


PLAN OF THE INTERIOR OF THE GREAT PYRAMID.
terranean chamber" hewn out of the rocks below the pyramid (see above Plan). In the ceiling of this descending passage, ninety-two feet from the entrance, there begins an ascending passage, the lower end of which is cunningly closed by seventeen feet of plug blocks of granite. After 122 feet this ascending passage
branches into two: one horizontal, leading to a chamber of limestone in the axis of the pyramid; the other still continuing to ascend, but expanding into a splendid hall, at the upper end of which, behind an ante-chamber, is the chamber in which the king was buried.

We shall presently stand at the upper end of this hall and look down, but before doing so, notice that dark hole in the masonry, partly stopped up with stones, on our extreme right. That hole is one of the best witnesses we possess to the skill with which the entrance here was closed, for the caliph el-Mamûn ( 813 to 833 A. D.), the son of the famous Harûn erRashid, whom we all know in the Arabian Nights, forced an entrance into the pyramid for the sake of the treasure, which it was supposed to contain; and this hole is his forced passage. As might have been supposed, his workmen attacked the middle of this side, and they toiled for months, with the entrance passage just above their heads and a little to the east, till the sound of falling stones within the pyramid, led them toward the sound and they emerged upon the descending passage. But as the pyramid had been robbed they found nothing but the king's sarcophagus in the upper chamber, and to appease his disappointed followers the caliph was obliged to place some of his own treasure there, that they might find it and be satisfied.

We are now to take our position at the top of the "Great Hall" (see plan), and look down its entire length.

Position 24. Looking down the main passage leading to Khufu's sepulcher within the Great Pyramial
What a gloomy, forbidding place! The bats flitting silently hither and thither whisk into our faces
draughts of the stifling air, superheated by the suns of five thousand years, which have shone upon the pyramid until it glows like a furnace. It is intolerable, and the perspiration pours down our faces as we rest after the ascent. We are at the top of the grand hatl and are looking down its slippery slope, congratulating ourselves that we have reached the level at the top; for without the ready assistance of the Arabs, the ascent of the hall is none too easy, and the cumulative velocity of a slide down that long, steep floor is no light matter when one reaches the bottom. One hundred and fifty-seven feet long and twenty-eight feet high is this wonderful hall, and the four natives with candles stationed along the descent may indicate its vast extent, as the last candle at the lower end glimmers in the distance. But it is very narrow in proportion to its length, for the side walls are only four cubits apart, that is, less than seven feet. The ramps on either side, upon which our natives are sitting, are each a cubit thick, leaving the width of the floor only two cubits, less than three and a half feet.

Overhead, beginning with the third course above the ramps, the courses project, each beyond the next lower one, for seven courses to the roof, lost in the gloom above. The projection of each of the seven courses is just a palm, so that the total projection of seven palms is exactly a cubit from either side. This makes the distance between the side walls at the roof two cubits; that is, the roof, like the floor between the ramps, is just two cubits wide, a little over forty-one inches. This gradual narrowing toward the roof is, of course, for safety, as the roof must support the enormous weight of the masonry above. Some of the blocks of the side walls are not accurately dressed on the exposed

[^24]surface, but if you will closely examine the joints between the first and second courses above the ramps, you will see that the surfaces now in contact are set together so skilfully that the seam can only with difficulty be discovered. Indeed there are twenty ton blocks in this pyramid which are set together with a contact of one five-hundredth of an inch, an accuracy which not only surpasses the modern mason's straight edge, says Petrie, but quite equals that of the modern manufacturing optician. How many centuries of development must have been required to attain the skill to do work on such a grand scale, and at the same time with such exquisite nicety!

Up this superb hall the body of the king was borne on the day of burial, and those cuttings in the side walls just above the ramps, were probably for the reception of the timbers intended to facilitate the ascent. The chamber behind us in which the body was to rest is not less remarkable than the grand hall down which we look, and there we are now permitted to take up our station. See the "King's Chamber" in the plan on page 129.

> Position 25. Khufu's sarcophagus, broken by robbers, in the sepulcher-chamber of the Great Pyramid

Deep in the heart of the great pyramid! And before us is the sarcophagus in which the king was entombed. See how the tomb robbers have broken away the corner in their mad search for treasure. There his body was torn from its resting-place and plundered of its rich regalia and splendid jewelry, such as we have seen in the Cairo Museum, and then left in dishonor and
confusion among fragments of stone and tattered mummy cloth lying upon the floor. At least so the mummy of King Mernere was found in his pyramid chamber at Sakkara in 1881, and there is no reason to suppose that the robbers treated the body of Khufu any differently. But this great pyramid was often visited, and was the subject of a similar thieving attempt under el-Mamûn, as we have seen; so that the remains of his body, those royal limbs; that once sat upon the throne of the Pharaohs, wielding a power unknown before in the antique world, were scattered like rubbish of the street and gradually lost. Does not Brugsch tell how he carried the body of Mernere from the Sakkara pyramid to Cairo on a donkey, and after this treatment had resulted in breaking the desiccated body into two parts, he took one of them under his arm, while his companion seized the other in the same way, and thus they walked into Cairo, bearing the mortal remains of a great king! If the body of a Pharaoh could be thus treated by an Egyptologist, who had every reason to pay it honor and respect, what may we not expect from ancient tomb plunderers!

We stand in the presence of most graphic evidences of the futility of the great pyramid and of all the hopes which inspired its construction. And yet what labor and wealth and skill went into it! Look around you here. We have stepped out of the upper end of the great hall, down which we have been looking, through a small ante-chamber, once blocked by four portcullises of granite, through which the tomb robbers were obliged to force their way; and reaching this burialchamber, usually called the "king's chamber," we have turned to the right (northward) and are looking west,
and slightly north, with the west wall of the chamber before us. The whole chamber is of granite, 17 by $3 \pm$ feet, and 19 feet high. The great hall through which we came and all the masonry we have thus far examined, are of limestone like the core and casing of the pyramid; but for this, the final chamber where the king's body was to lie, granite from the far cataract was chosen.

Measure with your eye the huge granite blocks, as the white raiment of these two natives is outlined against them; and note the enormous slabs that form the floor. Over our heads are two hundred and fifty vertical feet of masonry threatening to crush in the roof. The great granite beams that form the roof above us are about twenty-seven feet long, four feet thick and some six feet high, as they lie on edge, and they weigh from fifty-two to fifty-four tons each. Yet an earthquake has so wrenched the masonry that every one of these beams, nine in number, is now broken short across, from one end of the chamber to the other; but the biting grip of the enormous weight above still holds them in place. In 1763, Mr. Davison, the British consul at Algiers, while examining the uppermost corner of the great hall outside, discovered a passage leading from that hall to a rough chamber over this, where we now stand. It was very low and was roofed with granite beams like those of the roof above us. Col. Howard Vyse, while at work on the pyramid in 1839, was led to believe that there were similar chambers above that of Davison, and after hewing a passage upward from Davison's chamber he found no less than four more, making in all five of these chambers over us. It is evident that they are construction chambers,

[^25]having no other function than to render the roof of the burial chamber safer by relieving it of some of the vast weight from above. The fifth or uppermost of them may be called a great success in this respect. It consists of a massive peak, like that over the entrance passage which we saw from the outside, built of limestone blocks, which receive and by their sideward thrust transfer from the roof to the side walls, the colossal weight to be borne. Petrie, however, thinks that there is no thrust, but that these great limestone beams extend far down into the masonry on each side of the chamber, and thus anchored in the masonry they cannot give way at the peak, but resist like cantilevers. In any case, it will be seen how effective the crowning device is in thus supporting that solid mass above it of some 250 feet in height, so that the roof of the chamber, shattered as it is, has not fallen in, bringing down the whole complex above. But Petrie thinks that the time is coming when the roof beams at least must give way, and the chamber will then cave in over our heads.

And now we must leave the interior of this stupendous monument. Can you imagine the fateful day, when passing up the great hall, with flaming torches the funeral cortege entered this granite chamber, and bearing the mighty king in his cedar coffin, they laid him in the granite sarcophagus at our feet, and hermetically fastened on with molten metal the massive granite lid? All about them, as about us now, were hundreds of feet of solid masonry; in no direction can we reach the bright Egyptian sunshine, without passing through several hundred feet of solid blocks. As they go out through this ante-chamber behind us, they

[^26]let down four huge portcullises of granite, to shut in forever from all violation the sacred dead. Down through the great hall they go, into the descending passage below it, at whose lower end, the workmen drop into the yawning opening, block after block of granite, filling the lower end of the passage for seventeen feet; and having thus shut themselves in, they escape through a secret well cut for the purpose in the masonry after it was laid. Then ascending to the entrance where the daylight appears, the cunningly fitted block, which is to hide all appearance of an opening is dropped into its place and the great Khufu is left to his eternal rest.

It is to-day nearly five thousand years since these walls reverberated to the fall of the last block into its place; the whole history of the world has been enacted since that sound died away among these stones, and here we stand at the empty sarcophagus of King Khufu. As far as preserving the soul of the great king is concerned, all the wealth and power of a kingdom spent in putting his body into this eternal husk of masonry, have been in vain. But all unconsciously, by constructing this monument he brought forward a long stage upon their way, the developing arts, which were called in to aid in the creation of an indestructible mausoleum for his body; and for what Khufu thus accomplished we should remember him, not only in wonder, but also in gratitude.

Descending the grand gallery, we shall now take a position to the southeast of the Great Pyramid by the side of the so-called Granite Temple. On Map 5 find the red lines numbered 26 , which show that we shall be looking northwest.

[^27]
## Position 26. Ruins of the Granite Temple by the Sphinx, with the Great Pyramid of Gizeh on the northwest

As we stand here looking northwestward across the granite structure by the Sphinx, we have Memphis behind $u s$ and Cairo on our right. If you will examine our former point of view in this locality (Position 17), you will see that we have here merely stepped to the right and ascended the ridge of sand, which was there in our front; thus bringing into view this granite building which lies too deeply embedded in the sands to be seen from below. The exterior has never been excavated, but the interior has been almost wholly cleared of the encumbering sand. It is about 140 feet square and some forty feet high. The rough wall which you notice on the further side is but the core of a wall once splendidly cased with granite. It has been supplemented at this corner by this rude rubble wall built by the Service des Antiquités to keep out marauding native intruders. The ancient wall once surrounded a court open to the sky, which it enclosed like a parapet. The pavement of this court formed the roof of the series of chambers below, these chambers having been lighted by slits cut obliquely through the floor of the court. You may see the remains of these slits on the upper edge of the side wall of the central hall, just to the left of the native, who stands on the modern wall directly in front of the camel close to us.

These lower halls are still largely intact. They form a large $T$, the perpendicular of which lies pointing westward toward the second pyramid, out of range on the left. We are looking obliquely across this perpendicular as it emerges on the left of the native in the long black robe, to whom we have referred. It is in
the further wall of this hall that the lighting slits may be seen. In the corner diagonally opposite us is a descending entrance passage, of which we may see the upper edges of the side walls. Directly under the camel on the further wall is a door piercing that wall; it terminates a winding stairway, which rises from the descending entrance passage and formed the connection between the lower halls and the court above. The top of the door leading to the lower end of this stairway, may be seen near the upper end of the descending entrance passage, just on the left of our blackrobed native's white cap. The roof of these walls, which, as we have said, was likewise the floor of the court, was supported on magnificent granite pillars, each hewn in one block. Those in the stem of the T, ten in number, are forty-one inches square and weigh thirteen tons each. Directly over the hollow of the camel's neck, just before us, is a smaller hall, parallel with the head of the T, and here, Mariette, who discovered the building in 1853, found a well, from which he took no less than seven portrait statues of Khafre, the builder of the second pyramid. One of these statues we have already seen, during our visit at the museum in Cairo.

The presence of these statues and the fact that yonder descending entrance passage is built in obliquely so as to point directly up the causeway leading to the temple, which we have already seen on the east side of Khafre's pyramid (Position 21), would indicate that this building here was erected by him, and that it therefore belongs to the same period as the pyramids. Indeed, it is thus clear that the building begins the causeway leading up from the plain on our right to the second pyramid, now out of

[^28]range on our left. The recent discovery of a similar structure at Abusir, south of our present station, further demonstrates, that the building before us is the massive monumental gateway, forming the entrance to the masonry causeway, leading up to the pyramidtemple, on the east front of the second pyramid. We have retained the term "temple" in the above title, only to avoid misleading those numerous travelers who only know the building as a temple, which it has so long been supposed to be. Up through this monumental portal nassed the white-robed processions in the departed Pharaoh's honor, to ascend the long causeway beyond leading to the court of the pyramid temple, where the periodic feasts of the temple-calendar were celebrated. Many a problem which now vexes the student of this remote age, would be solved, if we could have stood on the now vanished floor of the roof-court which crowned this great gateway, and looked down upon such a celebration. It is a structure worthy of the builder of such a pyramid, and its walls and floors of polished granite and translucent alabaster make it one of the most magnificent monuments of Egypt.

And now as it rises over the head of the silent Sphinx, we gain our last view of the Great Pyramid, towering in the background and dominating all this scene, so rich in monuments of a decadent people's one-time magnificence, so strewn with landmarks that determine for us the course of that long road by which man has journeyed through past ages to attain his present exalted station.

Our next position is to be out there in front of the Sphinx.

## Position 2\%. The great Sphinx of Gizel, the largest royal portrait ever hewn

At last we stand before the silent mystery of the Sphinx. Its time-scarred, weather-beaten face looks out upon the plain, and fronts the rising sun, as it has done these many thousand years, and still we question its mute lips in vain as to its age and origin. Behind it, as if under its mysterious guardianship, rises the second pyramid, before which, on its east front, we discern the ruins of its temple, which we have already seen from the summit of the Great Pyramid (Position 21). In the age when that pyramid was being built, or perhaps earlier, there arose here a promontory of rock, a jutting headland of the cliff, which one of these remote kings chose as the site and the material for his statue. For you must know that the sphinx, which is a very common form throughout Egypt, is but a symbolic portrait of the king. The lion's body, with its forepaws extending as you see beneath the cliff on which we stand, is the symbol of the king's might, and the human head is a portrait of the king. Hence, with the exception of a few sphinx-statues of the Queen Hatshepsut, the sphinx always portrays a man, and even the queen's sphinx-portraits always represent her as a man. The Greeks therefore misunderstood the character of the sphinx, in representing it as a female creature. Out of this headland of rock, then, the royal portrait was hewn, and as it now stands, it is still a part of Mother Earth. But already in remote antiquity, as far back as the 15th century B. C., the wind-swept sands of the desert had driven in and covered it to the breast, piling up in vast drifts before it, and spreading in mighty billows which en-
gulfed both the sphinx and the granite gateway, which is just behind us on our left.

Right before us is evidence of the age when this sand inundation had already occurred. Do you see standing between the forepaws and before the breast of the monster, that large granite tablet? That is a massive architrave taken from the granite portal, which we have just visited, for a monument of King Thutmosis IV of the 18th Dynasty. By appropriating it there one was saved the trouble of quarrying it at the first cataract and transporting it over six hundred miles down the river to this place. It contains an inscription which narrates how, while he was still prince only, Thutmosis IV was hunting in this region, and proceeds: "One of those days it came to pass that the prince Thutmosis came coursing (in his chariot) at the time of midday and he rested in the shadow of this great god (the sphinx). A vision of sleep seized him at the hour when the sun was in the zenith and he found the majesty of this revered god (the sphinx) speaking with his own mouth, as a father speaks with his son, saying: 'Behold thou me! See thou me! my son Thutmosis. I am thy father . . . . who will give to thee my kingdom on earth. . . . . The land shall be thine in its length and breadth. . . . . The sand of this desert upon which I am has reached me. Turn to me, that the desire of my heart may be accomplished.'" By thus promising him the kingdom, the god (as the Egyptians of the time already thought the sphinx to be) furnished the young prince with a sufficient motive. He evidently cleared the sphinx of sand, and received the kingdom in fulfillment of the promise made. Subsequent generations had the incident recorded, as the story of how he gained the throne by an oracle of the god.

The monument was restored by Ramses II, by the Ptolemies and the Romans, but in modern times it was first excavated by Caviglia, early in the last century; then by Mariette, and finally by Maspero in 1886.

Enough has been cleared so that we may appreciate the colossal proportions of the monster. The body is said to be 140 feet long and the sacred serpent that once crowned the forehead was seventy feet from the pavement. And if a man were standing on the ear, he would not be able to reach the top of the head with upraised arm. How puny appear these futile moderns, thus contrasted so sharply with the work of their great ancestors! For it was thirty feet from side to side of that massive royal head-dress, the face is fourteen feet wide and the mouth is seven feet and seven inches in length. What a misfortune for the Sphinx that the Moslems are forbidden images of every sort! For what with their iconoclastic zeal, and the vandalism of the Mamlukes, who used it for a rifle target, not to say anything of the winds and storms of thousands of years, it has lost all its original comeliness. Yet up to the last century it had still preserved some of the original red flesh-color on the face; and portions of the beard were found between the forepaws; one of these fragments is still lying there and another is in the British Museum. The face was once winning and beautiful and is so spoken of by the Arab chroniclers. The body is also excessively weathered, so that the statue of some god attached to the breast between the forepaws is quite unrecognizable. This weathering is to some extent ancient and has been repaired with masonry sheathing over the paws and sides, a work of probably Roman date.
Position 27. Map 5.

There are between the paws a chapel and an altar of late date.

The origin of the sphinx is still a mystery, and as it has never been entirely excavated and freed from sand, it is possible that complete clearance around its base might solve the problem. The tablet between the forepaws refers to Khafre, the builder of the second pyramid, but the face of the stone is so broken where the name occurs that it is not clear in what comnection he is mentioned. But because of this mention of him, and the proximity of his pyramid, he is often said to have been the author of the sphinx. You can almost see from here the mastaba shafts, cut down through the leviathan's back. There are no shafts here earlier than the Old Kingdom, so that the king who made the sphinx must have dismantled some Old Kingdom mastabas to clear the rock for the creation of his monster statue, which therefore is not earlier than the 3rd Dynasty, and is not to be attributed to prehistoric men, as is sometimes done. Latterly some evidence has been adduced to show that the statue is a portrait of the 12 th Dynasty king, Amenemhet III, but the question still remains uncertain.

This native who has stationed himself so picturesquely just before us would be very glad to carry us to the Mena House upon the rocking back of his leisurely camel, and if we have a few piasters in our pocket, and do not fall over the head of the beast as he awkwardly raises his hind quarters in climbing to his feet after he has dropped down to let us mount, I have no doubt the novelty of the ride would be enjoyed. At the hotel we should find an incongruous modern tram, which would whisk us back to Cairo,
with a speed quite unprecedented in this ancient land, giving us little opportunity to marvel as we ruminate upon the wonders we have seen in the mighty cemetery of Gizeh, the most wonderful cemetery in the world. From Cairo we shall go southward to the site of the famous city of Memphis. The number 28 in red on Map 4 indicates in a general way our next position.

## Position 28. Statue of Ramses II, an embellishment of a now vamished temple of Memphis

How are the mighty fallen! We stand on the Nile bottoms, eleven miles south of the cemetery of Gizeh, and you would not imagine that these palms are now growing in what was once the streets of mighty Memphis, the vast city, whose southern extremities reached to Dashur, and whose northern limits were close upon Gizeh (see Map 4). Here where now the waving palms are supreme, was the great capital city, which grew up in the days of the Old Kingdom, and became a metropolis of the ancient land. As reign after reign added to its magnificence and beauty, its fame passed into other lands; Greek travelers wrote of it, and Greek poets sang of it, and in the days of the Roman empire it was the goal of wealthy Roman tourists, as Thebes is now for the hosts of Cook. As far down as the 12th century of our own era, the Arab writers speak of it as filled with an amazing host of marvelous monuments; but after that it began to serve as a quarry for building stone, and under the attacks of the Cairene architects of the Moslem sultans its great walls and monuments gradually melted away, until as century after century passed, they disappeared one after another like those of Rome under a similar proc-

[^29]ess. But unfortunately this process was not arrested in its course as at Rome, but ceased only with the total annihilation of the city.

A vast city, filled with splendid temples, colonnades, long avenues of sphinxes, colossal obelisks, huge sculptured statues of the Pharaohs like this lying here, lovely temple lakes with groves and gardens and vineyards, gorgeous palaces, luxurious chateaus of the rich, with fish pools and tempting summer houses, bright with myriad flowers of all climes and hung with lotus blossoms; vast quarters set apart for the hosts of foreigners of every race that frequented the city, from Mycenæ, the upper Euphrates, and the Phœnician cities on the north, to the dark-skinned Nubians of the upper Nile on the south; huge market-places and bazaars where these foreigners traded and offered to the luxurious Egyptians the products of every clime and sun; beautiful canals from the river, branching through the city and furnishing coolness and refreshing to the thirsty gardens, or bearing in a glittering procession a line of temple barges, decked with flowers, and filled with chanting priests and singing women, as they conduct the sacred Apis-bull from one great temple to another-a world metropolis with all these and a thousand other vanished splendors, sleeps on this spot under these swaying palms. You may go miles over the ground which it once occupied, and of all that once made it famous, you will find, besides a few mounds, only this colossus and another not far away, which we shall not have time to visit.

Such statues as this fallen giant here were placed by the kings of the Empire in front of their temples on either side of the entrance. Its presence therefore indicates that we are standing on the site of a
temple in the city. This fact will explain more graphically than any words why it is that we shall not visit any of the Delta cities, with one exception. They were all like Memphis, so near the northern frontier that the invading armies of century after century for thousands of years have swept over them, till there is nothing left but a confused expanse of scattered blocks. In the vicinity of Cairo, the ruin wrought by siege and sack has been succeeded by the slow annihilation which follows the pick of the quarryman. There are many Delta cities, known to have been places of great importance and power, of which we do not even know the site at the present day. Thus all knowledge of the location of the great commercial city of Naukratis was lost, until Prof. Petrie, wandering in the Delta, one lucky day, happened upon a stone bearing the name of the city. We shall meet no temple walls still standing, until we reach them far south in Upper Egypt, where distance from the northern invader and the Moslem builder has secured them some measure of immunity and left them to the mercies of old Father Time.

This statue is a portrait of Ramses II, who reigned some fifteen hundred years later than the builders of the Gizeh pyramids. You will remember that we looked upon the face of his father, Sethos I, in flesh and blood in the Cairo Museum. The statue as it lies is some twenty-five feet long, to which we must add the height of the crown, which stands on the ground at its head. It is of granite, and was brought from the quarries, which we shall later see at the first cataract, some six hundred miles, to this place. Large as it seems, compared with the native who stands upon it,
it is a pigmy beside the colossi, which we have yet to see.

We move westward now to view a portion of the cemetery of ancient Memphis, and as is usual in Egypt, we shall find the city of the dead in a much better state of preservation than the city of the living. The red lines numbered 29 in the lower left-hand portion of Map 4 show this next position, and that we shall be looking west with the Nile behind us.

## Position 29. The earliest occupation of men and the first attempt at a pyramid, Sakkara

It is but a limited stretch of the Memphite cemetery which we have before us; but it includes a remarkable monument, which we promised you should see, as we stood on the summit of the Great Pyramid. Gizeh and that pyramid are now some eleven miles away to our right, as we look out upon this lineal ancestor of the Great Pyramid, without which the Great Pyramid never would have been (see Map 4). This terraced structure was built by King Zoser, a Pharaoh of the 3rd Dynasty. Let us remember him, for we shall find a curious inscription of his at the first cataract (Position 88). He stands at the dawning of the Old Kingdom, before any pyramid had ever been built.

He first erected here a mastaba, much like those later built at Gizeh, which you saw there. This mastaba of Zoser is now in the heart of that strange terraced structure yonder; for he enlarged his original mastaba upon the ground and also carried it upward by placing upon it a second mastaba, smaller than the first. This process he repeated, producing at last the terraced structure as you see it now. It is neither pyramid nor
mastaba, but a kind of transitional form between the two. It is one of the most important links connecting the mastaba and the pyramid. One of Zoser's successors, Snofru, the last king of the 3rd Dynasty, completed the transition, and after building a terraced monument like this, he filled out the terraces in a smooth slope at the pyramid angle of $52^{\circ}$. This was the first pyramid ever built, and it now stands at Medum, near the south end of our sixty-mile line of pyramids.

We thus trace the development from the sand heap through the mastaba; then this terraced structure before us, and finally the first of all pyramids of Medum. Strange that so soon after the attainment of the pyramid form by this process, the erection of the greatest pyramid ever built should follow! It is like the appearance of a Shakespeare so early in the history of the English drama. But we have before us, I repeat, one of the landmarks in the path of that long development which led up to and made possible the Great Pyramid. How fortunate are we when these surviving footprints of early man are not found scattered and isolated, but as here, one following upon another, and all leading upward toward some summit, which we have already recognized.

This terraced tomb of Zoser is 196 feet high, and exceeds in height as it does in age all the surrounding pyramids. Why it should have been dropped in here at this point, long before neighboring Memphis was capital, or there were any other royal tombs here, we do not know. The surrounding pyramids are all of the 5th and 6th Dynasties, in accordance with what we said at Gizeh, that in following our sixty-mile line of pyramids southward, we should be passing from the

[^30]older to the younger and moving down the centuries as we move down the line; but there are individual exceptions like this tomb of Zoser and the pyramid of Medum, already referred to.

Let us not forget that most of the tombs in this cemetery are invisible. The thousand generations that lived at Memphis now sleep beneath our feet. On every hand are covered tombs, shrouded in the accumulated sands of thousands of years. You may sink a shaft almost anywhere here and find a masonry tomb or mastaba, and there are literally miles of the humbler burials of the poor distributed along this desert margin. Practical considerations alone, if myth and religion had not led the same way, would have forced the ancient Egyptians to bury their dead in these unproductive sands, rather than in the cultivable soil of the restricted Nile bottoms, for during all these thousands of years at least ten million of people died in Egypt every century, and a hundred million every thousand years, all of whom it was desired to place in permanent resting-places, and many in enduring masonry tombs. A portion of this sleeping host therefore lies beneath our feet, wherever we walk, over these desolate sands, and yonder swarthy native shepherd little knows how many generations of his ancestors he is trampling under foot, as he drives homeward his little flock. In hinn and his flock, backed by the tomb of one of his ancient rulers, we are again confronted with that ever-present contrast, between the modern and the ancient condition of this people. From the creation of such works as yonder tomb, at the very dawn of human history, they have fallen until their sole industries are herding and agriculture, the
primitive avocations of their ancestors in the remote days that lie far behind this tomb of Zoser.

But not merely this man's own ancestors are buried here; the ancestors of his cattle-at least some of them-also lie in this vast cemetery! For here was buried at his death, the sacred Apis-bull, and long generations of the ever-reincarnated god are here interred in vast galleries, having a total length of some 1,150 feet, hewn in the rock beneath these sands. The embalmed body of the animal was regularly buried in a huge granite sarcophagus about thirteen feet long and weighing sixty-five tons. Twenty-four of these sarcophagi are still in place in the chambers hewn out for them. The temples built over these galleries have now disappeared, but in classic times the whole, known as the Serapeum, was the shrine to which thousands of pilgrims annually journeyed, walking over these very sands where we now stand; and a wealthy and influential priesthood maintained a splendid ritual and daily service of the god. It was for centuries one of the most important religious centres of antiquity, especially when under the Ptolemies, the bull (Osir-) Apis was identified by misunderstanding, with the popular foreign god Serapis. Thus among the hosts of pilgrims were found large numbers of foreigners from all parts of the classic world. But all its glory is now departed, and flocks and herds are now driven over its sand-covered avenues of sphinxes and fallen sanctuaries. It was utterly forgotten, save by the learned few who knew of it in the literature of the Greeks, until it was discovered and excavated by Mariette in 1851.

We shall not stop to look into the burial vaults; we must return toward Cairo, and visit the quarries,
whence came the stone for the pyramids. These quarries you find on Map 4, about seven miles south of Cairo, not far from the east bank of the Nile.

## Position 30. Quarry chambers of Masara whence came the blocks for the Gireat Pyramid

Do you remember those $2,300,000$ two and a half ton blocks in the Great Pyramid? This is where most of them were taken out. The chambers before us belong to the great quarry of Masara; there are others in the vicinity, especially that of Turra, this last having also doubtless furnished limestone for the great pyramid. You will remember that as we stood on the summit of the pyramid, we looked eastward and I called your attention to the location of the quarries (page 120). We noted the broad plain of the valley, across which the stone was transported. As we stand here and look out you see the glimmer of light from the opening, far behind that huge central pillar which supports the roof. Now imagine the long lines of swarthy workmen tugging at the ropes as they draw out the massive blocks, the volleying click of innumerable chisels as the blocks are hewn from the mountain, and the hoarse shouts of thousands of slaves, mingled with the sharp call of the task-master and overseers when there is any sign of lagging. All this these walls have looked upon as the vast galleries were pierced deeper and deeper into the mountainous cliff. What tales of misery they could tell-of foreign captives lashed to their tasks by the thousand, driven into these galleries fresh from their Syrian homes, where the Pharaoh found them on his last victorious campaign. And now they are forced to furnish the stone to
build the temple which shall commemorate the Pharaoh's victory and their own captivity, for upon its walls in triumphant reliefs and swelling songs of praise to the Pharaoh's prowess, the story of his conquest shall be recorded, with long lists of the towns from which the wretched captives were gathered in like cattle. Such records we shall see when we have reached Thebes. It is in these places that the Pharaohs spent much of the wealth gained in Syrian conquests in order to appease the gods, who gave them victories, with larger and more splendid temples. These we shall visit in the cities of the upper river. There we shall observe how the great builders, whose names are all about us here, carved on the walls of these vast galleries, employed the materials which captive labor furnished them.

From these quarries seven or cight miles south of Cairo we shall now move to the site of ancient Heliopolis, some six miles on the other side, or, to speak more exactly, on the northeast side. Our position is given by the red lines numbered 31 in the upper portion of Map 4.

## Position 31. The sole survivor of agreat city, the Obelisk of Heliopolis

This granite shaft is the only considerable monument on this site to tell us that here once rose a magnificent temple in the heart of a great city. We might now repeat almost every word that we have used of Memphis; indeed, if we substitute the Mnevis bull for the Apis-bull in that description, it will apply exactly, except in the matter of the north and south limits of the city there given. It was the oldest great religious
centre of ancient Egypt. Here the priests of the sungod had a sacred school from which went forth most of the religious compositions which later became autthoritative. The temple was, during the Empire, second only to that of Amon at Thebes, in wealth and power. In Greek times it was still famous for the wisdom of its priesthood. Tradition states that Plato studied thirteen years here. The city itself was early destroyed, and Strabo, the geographer, found it in ruins in 60 B . C. ; but his priestly guides pointed out to him the rooms of Plato and the Greek mathematician, Eudoxus. But the sacred college in which they studied no longer existed. Heliopolis is the Greek name of the city; it was called On by the Egyptians and in this form it is mentioned a number of times in the Old Testament. You will remember especially how the Pharaoh gave to Joseph the daughter of a priest of On as his wife. That priest ministered under the shadow of this very obelisk, and it had already been standing several centuries at that time.

The city is also of interest because the obelisk now in New York once stood here with its fellow, which is now in London; for obelisks always stood in pairs at the entrance of a temple. They were erected to celebrate the thirtieth anniversary, not of a king's accession, but of his appointment as heir to the throne. On all four sides of this obelisk in a column of hieroglyphic beautifully cut down the middle, are recorded the full titles and names of King Sesostris I (Egyptian Senwosret, formerly pronounced Usertesen); with the added indication that the obelisk was erected on the occasion of the celebration of the king's thirty years' jubilee.

The temple before which this obelisk and its fellow (which stood until the 12 th century) were erected, was built by Amenemhet I; and his son, Sesostris I, besides erecting these obelisks, made some additions to the temple. He left a record of these works in a building inscription, cut upon a large tablet, in one of the courts of this temple. One day when this tablet had been standing some five hundred years, in the time of Amenophis II (18th Dynasty) a certain scribe seeing this fine example of the official prose current in the classic days of his 12th Dynasty ancestors, decided to make a practice copy of it. Seating himself before it, he produced a roll of leather, on which were some lumber bills and other memoranda duly dated in the third year of Amenophis II, and turning it over he copied the fine old building inscription on the back of his bills. Sesostris I's great tablet, with its building inscription, perished centuries ago, but the scribe's hasty copy in rapid, running hand on the back of the lumber bills is now in the Berlin Museum, and thus a rare and fortunate accident has preserved for us Sesostris I's building inscription. In this record he makes a prophecy which has been remarkably fulfilled. He says:
"My beauty shall be remembered in his (the sun-god's) house,
My name is the pyramidion and my name is the lake."
The "pyramidion" is the small pyramid which surmounts the obelisk, and the king means that his name shall be identified with the obelisk and the sacred temple lake, made by him, and thus immortalized. And strangely enough his obelisk, with its "pyramidion," the only surviving monument of Heliopolis, has

[^31]indeed preserved his name, and shall perpetuate it till the end of time, while all others here have perished.

It is sixty-six feet high, and is wrought from a single block of granite, quarried and worked at the first cataract and brought down the river on a huge barge. It probably weighs some three hundred tons. It and its now vanished comrade stood here in the very path of foreign invasion from Asia and Europe, and after weathering the storms of war, which raged around it for three thousand years, its comrade fell some seven hundred years ago, and was broken up and carried away by the Moslems. But the survivor has seen the civilization of the western world gradually becoming dominant in the East, and bringing with it a reverence for these mute witnesses of a great past, which, we hope, will secure them an unlimited lease of life. In this spirit the Service des Antiquités has erected this protecting paling which you see around the obelisk, to hold at bay the native, the relic-hunter and all who may be minded to do it injury.

We here gain a good idea of the rich, level soil of the great Delta, although as we are looking south toward Cairo, the great portion of the Delta lies behind us, stretching away for nearly a hundred miles.

We have already intimated that Heliopolis lay on the route from Asia into Egypt. If you will look at the Map (No. 3) and trace the line of railway as it swings out from the Delta eastward, you will be able to follow that ancient route to the isthmus and the Suez Canal. Long before that railway was built, there was a canal along this line, connecting the Salt Lakes and the Nile, which is the same as to say the Red Sea and the Nile. We know that it was in existence in the
days of Necho, before the Persians held Egypt, and it is probable that already in Ramses II's time (14th century B. C.), his engineers had completed this canal. Before the construction of the canal, however, the route it later followed had been for ages a natural line of communication between Egypt and Asia; for there is here a valley, or wadi, as the Arabs say, known as the Wadi Tumilat, which, leaving the Delta, extends eastward to the isthmus, like a river of green through the desert, that bounds it on either hand. The district around the western end of this wadi was the land of Goshen, in which the Hebrews were given a home and pasturage for their flocks and herds; while near its eastern terminus was the city of Pithom, which they are said to have built. You will remember that the Bible story states that they built for the Pharaoh the store-cities of Ramses and Pithom (Exodus 1: 11). The location of Ramses is unknown, but that of Pithom has been settled by the excavations of the Egypt Exploration Fund under Naville. It is the city of Pithom which we are now to visit. Find the red lines numbered 32 in the upper part of Map 3.

## Position 32. The brick store-chambers of Pithom, the city built by Hebrew boudsmen-looking north

Standing on the south side of the Wadi Tumilat, we look northward across the desert, and yonder in the middle distance the line of palms marks for us the depression of the wadi. The ancient canal, which once followed the wadi, and of which extensive remains are still to be traced, has been succeeded by a modern canal, which supplies the towns along the Suez Canal with fresh water from the Nile. Here

[^32]for ages the traffic and commerce of Egypt and Asia passed along. Here were the Pharaoh's frontier stations, controlling all ingress and egress. We have the hasty memoranda of an officer stationed on this frontier in the days of the Hebrews, noted on a piece of papyrus now in the British Museum, in which he records the passage of messengers and officials for several days, as they went up to Syria on various official business of the Pharaoh, a document showing how active was the communication between the Egypt and the Syria of that day. Ramses II did much for this region, in which the Pharaohs of earlier times had not been interested. They had merely passed through it on their way to their Syrian wars, but had given it little attention. Ramses II, however, as we have already stated, possibly cut the canal through the wadi. Fifty miles north (directly in our front) he built the magnificent city of Tanis (see Map 3), and in the wadi itself, according to the Biblical narrative, he also built the city of Pithom, where we now stand.

Large portions of such a city are necessarily built of sun-dried brick, and in making and laying such brick, the kings of the time employed thousands of foreign captives. There is in Thebes in one of the finer tombs there, a scene representing such captives engaged in brick-making. When we go up the river, we shall find the same industry still in daily operation (Position 39). It was quite in accord with the custom of the Pharaoh, therefore, thus to employ the Hebrews. The city is called in the Biblical story, a "store-city," and it is interesting to know that Naville found extensive magazines and store-houses among these ruins. Here before us are the walls of such buildings, and it

[^33]is possible that the very bricks before us were made by captive Hebrews.

Little is known of the history of this city in later times, but it evidently early fell into ruin, for in its exposed position at the door of Egypt, it could not have escaped speedy destruction. The sands of the desert then blew in upon the wreck, and only these low walls scattered over a few hundred feet, have survived to show us where the city lay. As we have already remarked at our visit to the site of Memphis, it is the same with all the cities of Lower Egypt. The ruin of war, the pick of the Moslem quarryman, and the rising waters of the Nile have annihilated the cities of the Delta, and with them have perished forever some of the noblest works ever wrought by man.

## Position 33. Dahabiyehs on the rirer ready for the jourmey to the Upper Nile

Who will ever forget that happy day, when the dahabiyeh, swinging out into the river with head to south, began her long struggle with the Nile current, a struggle, that carried one every moment nearer and nearer to the wonders of the upper river? The sailors spread the vast triangular sail, the fierce current boils and roars under the bow as the mighty north wind fills the huge canvas; slowly the palms and the villages seem to move northward, till gathering way, the picturesque craft moves faster and faster mile after mile, and the towers and minarets of Cairo drop behind a fringe of intervening palms. At last you are off for Upper Egypt!

Here you are already in that valley of which we have so often spoken, and you can see the tall cliffs, which

[^34]wall it in on the other shore. Similar cliffs rise behind us. In mid-river is a dahabiyeh, and you will be interested to know something of the craft in which the voyage can be most comfortably made. It is a long, narrow sail boat of the simple rig so common in the east. Divided approximately into halves, the forward half is devoted to the crew and the cook, while the after half is occupied by the passenger cabin. The cook presides over a tiny kitchen, perched like a dry goods box on the bow, just forward of the mast. Ordinarily there are no other quarters for the crew, and here on this low forward deck they sleep, eat, loaf in the sunshine, or tug at the oars as necessity requires. The passenger cabin in the after half of the boat is surmounted by an awning-covered deck, furnished with chairs, settees, hammocks, and a writing table. Below, the interior is usually divided into four parts. As you enter from the crew's deck you find yourself in a narrow passage leading down the middle directly aft, having on either side the pantries, store-rooms and servants' rooms; these form the first part. The narrow passage leads to the second part, the diningroom, which includes the whole width of the craft. Behind this a similar passage gives access to the sleeping rooms of the passengers, bath-room and the like; while behind this third part, lies the fourth, the drawing room. This arrangement may be varied somewhat at will ; and limited as that cabin appears for so extended an arrangement of rooms, it is nevertheless convenient and comfortable.

He who has at some time in his life made the voyage of the Nile in such a craft will often sigh for the dreamy days on that awning deck, lulled asleep by the lapping of the swift-flowing waters, or the slow
chant of the sailors bending to the heavy sweeps when the wind is low. There is a certain charm about this landscape which never leaves the voyager. The eye wanders languidly out over the far, still landscape, glowing in vivid green under the golden sunshine; the verdant plain is dotted here and there with palmgroves, beneath which nestle picturesque little villages, looking out in sombre gray against the deep green of the palms, save where the white of the Moslem minaret, gleaming through the leaves and rising above the treetops, proclaims the Egypt of to-day, when one would fain have pictured it all as it was in the days of the pyramid-builders.

This boat in mid-stream here, is floating with the current, with all sails furled, the sailors at the oars and a strong wind astern, that flutters the stars and stripes bravely, not to say also the flag of the ubiquitous Cook, and carries the boat rapidly northward. Astern is dragging the feluka, or small boat, in which are the chicken coop and a lamb or two for the larder of the passengers. The other craft moored to the bank is a less pretentious affair, and no one would imagine from looking at it, the origin of the word "dahabiyeh" as applied to these passenger craft. It means "golden," and has descended from the days when such boats were richly decorated with designs in gold, and belonged exclusively to the very rich.

The workmen just before us are transporting the large jars of which we see a long heap on the bank, awaiting shipment on the river. Such large jars, are made in great quantities in Upper Egypt, and their manufacture forms a considerable industry, especially at Keneh. Nothing is commoner than to see such a heap as this, only vastly larger, occupying the two

[^35]decks of a pair of cargo boats, lashed together for the purpose and floating in mid-Nile. Such a jar, unglazed, makes an excellent filter, and forms an indispensable part of the equipment of a dahabiyeh, for the yellow Nile water, when filtered and cleansed of the sand and other foreign substances which it carries, makes excellent drinking water.

Our first stopping place as we journey south, up the Nile, will be about fifty miles from Cairo, in the vicinity of the Fayûm. See Map 6. Our first position, as the red lines numbered $3 \pm$ on this map show, will be fifteen miles or so west of the Nile. We shall look southeastward.

## Position 34. Wratching a sand whirlwind, from the summit of the Hauare Pyramid

Now Cairo is off to our left fifty miles away. But what a picture of desolation! And yet we are standing in the midst of one of the most fertile tracts in the world. These rough sun-dried brick under our feet form the summit of the pyramid of Hawara, which stands in the mouth of the Fayum, and from this elevated point of view we are looking southeastward through the valley which connects the depression of the Fayûm with the Nile valley (Map 6). Out yonder on the horizon is the pyramid of Illahun. We should note it well, for it marks the southern end of our sixty-mile line of pyramids, to which we have so often referred; and the 12 th Dynasty, to which it belongs, was the last to construct great pyramids. That line, then, of which we have here reached the end, was in course of construction during a period of over a thousand years; and Lepsius, during his great expedition, found no less than seventy-six pyramids in the

Nile valley. What a line of noble sepulchers, and what a line of kings who raised them! Out of our range of vision, on the left, behind the hills, is the pyramid of Medum, the first real pyramid; built by Snofru, the last king of the 3rd Dynasty. With this exception, the north half of the pyramid line belongs to the Old Kingdom, and the south half to the Middle Kingdom, and thus as we have before noted, we have passed down the dynasties and down the centuries as we have come south from Gizeh.

The kings who made the 12th Dynasty so famous took great interest in the Fayûm. Here a depression in the desert of some thirty by forty miles, not differing from those which form the oases of the Sahara, had been flooded by the waters of the Nile inundation, which found access to the basin through the valley down which we are looking (Map 6). By enormous hydraulic works, continued from reign to reign, and completed by Amenemhet III, the waters were pushed back, and the completion of a wall or dike twentyseven miles long, restored to cultivation some 27,000 acres of very productive land. The body of water behind the dike was known to the Greeks as "Lake Moeris," and its basin in classic times, as the waters continued to recede, became the very garden of Egypt. We shall have occasion to refer to it again, when we visit the ruins of its principal city (Position 39). Under the 12th Dynasty kings, it was connected with the Nile by a canal, and served as a basin for the storage of water for use in irrigation. It was thus the forerunner of similar modern works, like that of the great dam at Philæ, which we shall later see. The modern successor of that canal is visible on our right. It is a natural channel, known
as the "Bahr Yusuf," that is, "the river of Joseph," whose name is thus connected in popular tradition with one of the most important sources of irrigation in modern Egypt, as it was with the exploitation of the country's fertility in ancient days.

The 12th Dynasty kings who thus improved the region, lived in the vicinity, and a residence city of theirs, now lost, was located somewhere between here and Memphis (which is off here on our left). Just here on our right, between us and the canal, you observe a few low mounds. These are the edge of the spot, which extends beyond our range on the right, where once stood the labyrinth, famous in the literature of the Greeks as the forerunner of the Cretan labyrinth. It is stated by them to have had no less than 3,000 rooms, which is unquestionably an exaggeration; but it must have been an enormous building, for the excavation of Petrie on the spot have shown that it was 800 by 1,000 feet on the ground plan. From the Roman period on, it was used as a quarry, and the walls were so completely carried away down to the ground, that it was very difficult for Petrie to trace the plan. Modern investigation has therefore been unable to determine its character and use with certainty, but judging from Greek descriptions, it can hardly have been anything else than a temple. Its builder was Amenemhet III.

You have been struck with the fact that this pyramid on which we stand is not of stone. It was, to be sure, once sheathed in a splendid casing of limestone masonry, which has since been removed for building material, thus serving as a quarry like the vast labyrinthine temple at its base. But the 12th Dynasty kings discovered that sun-dried brick
formed very effective core masonry for such a structure as a pyramid, when properly cased in stone, and thus they saved themselves enormous labor and expense in the quarries. When completed this pyramid was 333 feet and 10 inches square on the base, and 190 feet high.

Finding that the carefully planned pyramids of their predecessors were being opened and robbed, the kings of this time introduced the most ingenious devices to conceal the entrances to their pyramids, and to baffle the robbers when the entrance was once found. Instead of making the entrance of his pyramid on the north, as was customary in the Old Kingdom, the builder of this one placed the descending passage, which pierced the rock beneath this pyramid, here on the south side, on our right, and far to the west of the middle. The passage, after making four turns, then approaches the burial chamber from the north, having gone clear around it! At three of the turns, progress was completely barred by a huge trap-door block, weighing, in one case, twenty-two tons; but the dishonest architects of the Pharaoh had closed only the first one, certain that the royal family would never know what they had done with the other two, after the first was closed. The tomb robbers, therefore, had to cut their way through the great trap-door block, but were not troubled by the other two. But they were completely taken in by one of the architect's devices. They found the entrance to a certain passage carefully masoned up, and thinking it must contain something of value, or certainly lead to the burial chamber, they removed the masonry, only to find more behind it. This also they removed, and continually finding more, their appetites were but sharpened as they saw how

[^36]much labor had been expended in making the passage secure. After they had thus removed a masonry filling from a passage about 84 feet long they found it ended in an aimless cul de sac, in nothing, in solid rock!

The burial chamber itself was in the native rock beneath the pyramid, as it is in all pyramids except the first pyramid of Gizeh. There was no door, but it had been entered on the day of burial through the roof. To make this possible it was necessary to construct two roofs with a space between them. The upper roof was constructed of enormous blocks of limestone weighing fifty-five tons each, and was assisted in its burden bearing by an arch of sun-dried brick above it; the lower roof covered the chamber itself and had a trap-door block of quartzite at one end, weighing forty-five tons. This was lowered into place on the day of burial, after the king had been laid in his sarcophagus. The tomb robbers were unable to raise it, so they cut away one corner and crawled through. The chamber to which they had thus gained entrance is 8 by 22 feet on the floor, and 6 feet high, and is cut from one single block of "glassy hard" quartwite weighing 110 tons! Yet in spite of all these elaborate and costly devices, which must have exhausted the skill of the best engineers and craftsmen in that ancient realm, the robbers forced their way into that chamber deep under our feet and despoiled the body of the king of his splendid regalia, and pillaged the sepulcher of its magnificent furniture.

Seeing the futility of such means for protecting his sacred body, the Pharaoh no longer expended his wealth in vast sepulchers like these, and thus it is that we stand here upon the summit of the last pyramid.

When we have arrived at Thebes, we shall see that after a short interval of modest masonry tombs, built upon the plain, the Pharaohs followed the example of their nobles and hewed vast tombs into the mountain side.

Just one more glance up that connecting valley before we go down! See that cloud of sand which a wind-burst is carrying from the desert into the valley. That process has been going on for ages. For the archæologist nothing more fortunate could have happened than this gradual covering with sand, which we have seen so often burying fathoms deep the works of the Pharaohs. Myriads of monuments that rejoice the heart of the Egyptologist would have perished forever, had they not been thus covered by the timely sands and hidden from the destructive hand of the vandal. Myriads more of just such monuments still remain, secure beneath the friendly sands, awaiting the rescuing hand of the excavator. But these invading sands are anything but a blessing to the peasant. They do not in the long run gain much upon the Nile valley as a whole, but there are certain districts where they have taken complete possession.

Out yonder about midway between us and the tent of our photographer, you notice a transverse line running across the valley. That is the pipe-line of the English engineers, who by thus piping the water from yonder canal, are rapidly reclaining the district between the distant pyramid and that on which we stand. We see how the government thus utilizes the Nile inundation in this practically rainless climate, but we must now observe how the native employs the water, furnished him by Providence and the author-

Position 34. Map 6.
ities, in the vast network of canals, which we saw from the top of the great pyramid.

We shall now take time to see something of the industrial life of the Egyptian of to-day. Because the manner of doing things has been unchanged for centuries in this land, we shall be learning of ancient Egypt in studying the life of to-day.

## Position 35. An Egyptian shaduf, the oldest of well-sweeps, lifting the Nile waters to the thirsty fields

In a tomb-painting at Thebes, there are depicted the ancestors of these men, raising the waters of the ancient Nile, by means of precisely the same device as that which we find in the hands of these modern natives here. For many thousands of years it has been used in this way. It is simply the wellsweep of our grandfathers. A pole with a weight or counterpoise at one end, and a bucket hanging from the other, is suspended at a point not far from the weight, which then by its simple gravity draws up the bucket when filled from the waters below. The apparatus is of the simplest home-construction; the necessary poles and stakes are furnished by the scanty trees of the neighborhood, the weight is merely a huge lump of Nile mud, plastered on and allowed to dry; the bucket is only a hoop with a pocket of leather lashed to it, while the ropes are twisted from palm fibre as they have been in the Nile valley since the earliest times. With this primitive equipment the native raises the water from four to eight feet, though a strong man will lift it much higher; but when the Nile is low, it is necessary to resort to a series of
"shadufs," as they are called, one above another, till the level of the field is reached. In the proper irrigation of one crop, which continues for about one hundred days, the native must raise to his field, on the average, nearly four hundred tons of water to the acre four or five times during the one hundred days; and this necessity keeps him at work incessantly during a large part of the season, raising the indispensable 1,600 to 2,000 tons of water necessary for each acre.

An acre is usually counted as consuming the entire labor of one man at the shaduf. Wherever the traveler penetrates, he can hardly escape from its monotonous creak; day and night it is in his ears, and always mingled with the weird song of the weary fellah, as he bends to his heavy and never ending task. His children, although endowed with remarkable keenness and intelligence, are so early put to this blighting task, that they grow up into broken and exhausted energies, to sink at last into an indifferent lethargy. The tiny lad, watching his brother at the middle shaduf, will be forced to take his place by his brother's side before many years have passed, and when he is old and wrinkled like the old man at the top, he will still be found bowed and bent beside the heavy shaduf.

## Position 36. An Egyptian sakieh, or ox-driven bucket pump, raising water for irrigation

A small proportion of the Egyptian peasants are able to use another device for raising the Nile waters. This machine, known as a "sakieh," is again familiar to us in a less primitive form, as the bucket- or chainpump. A wheel which you see out yonder next to the river, as it revolves over the water, carries an endless band of palm rope, which hangs in a loop in the
water beneath the wheel. Distributed at intervals along this band are earthen jars, which, as the wheel revolves and the band moves, are carried down into the water, filled and continually raised to the top, where you may see two of them now, just as they are turning over and discharging their contents into a trough concealed behind the masonry. A black, horned buffalo revolves a rude horizontal wheel, which is geared with the axle of the band wheel, and as the animal walks slowly round, the whole ponderous machine with much creaking and groaning is kept in operation, and a constant stream of water runs out into the network of trenches which distribute the water throughout the fields. The driver is often a child of tender age, and not infrequently in this land of epidemic ophthalmia, we find a blind boy seated on the beam revolving with the machine, and driving the oxen which furnish the power. Blindness in one eye is often self-inflicted, and old women who understand the use of the noxious herbs which will destroy the eye, are much in demand, for when once the sight of the right eye is gone, the youth escapes military service. How necessary such irrigation is, you may infer from the dried and parched condition of the soil before us, the clods of which are baked to the hardness of sun-dried brick, from which they differ almost only in the matter of form.

Position 3\%. "Thou shatt not muzwle the ox when he treadeth out the com" - Threshing in modern Egypt
The rich soil of Egypt, fertilized every year by the black loam brought down by the inundation from the highlands of Abyssinia, yields two and sometimes
three crops a year under the system of irrigation of which we have seen some examples. The chief cereals are wheat and Indian corn (maize), but large quantities of rice are also cultivated, and to some extent also a kind of sorghum, called Kaffir-corn. The soil yields also an enormous return in leguminous plants and vegetables, which are largely cultivated. But the methods employed are the most primitive in the world; they use the same wooden plow, which we find depicted upon monuments five thousand years old, and everything else is equally antiquated. Thus we see them here driving the threshing sledge, a rude wooden affair, shod with iron teeth or cutting rollers, by which the grain is gradually crushed and loosened from the husks. The straw accumulates in a circle around the path of the sledge as the work goes on. The driver lolls lazily upon a rude seat, protected from the blazing sun by a bower of straw and leaves over his head, while his incongruous yoke, a camel and an ox, move slowly around the circle, the dull swish of their feet in the straw and chaff furnishing a monotonous accompaniment to his strange minor song. Behind them in bright green tones, shines the rustling corn field, and beyond rise the distant palm groves to mark the pale horizon line. It is such a picture as may be seen every day in this ancient land, and only adds to one's wonder that this people which became the mother of the mechanical arts and bequeathed them to the world, should have wrought such wonders in stone and metal and yet has been unable to pass beyond the primitive stage in the cultivation of the soil,

[^37]
## Position 38. The winnowing of the grain after threshing

Here is the next step in the process of harvesting in Egypt. The mixture of broken straw, chaff and grain is tossed into the air by the laborer, and as the heavier grain falls again to the threshing floor, the chaff and straw are carried away by the wind. How it brings up the symbols in the Old Testament! "The wicked are like the chaff which the wind driveth away." But it is a slow process, as you see here, requiring the tossing of the mixture over and over again; but, as you observe, there gradually gathers on the windward side of the heap (the right side here) a mass of fairly clean grain. Notice how the shadow of the palm falls across the brown grain-heap, and as the dust swirls off to leeward, and the white garment of the winnower flutters in the breeze, the precious pile that means bread for the peasant and his little ones slowly grows, until his comrade, who sits waiting on the ground with empty basket by his side, may fill it with the winnowed grain and carry it to the neighboring granary, built up of Nile mud in the peasant's courtyard.

Beyond, under the clustered palms lie the camels so largely employed by these peasants in the labor of the field; and here and there are the black buffaloes, which in this climate are a great boon to the fellah, as they endure the high temperature prevalent here, much better than any of the European or Asiatic breeds of cattle. They give very rich milk in considerable quantities, and the cream from it is as thick, and of the same consistency as butter. It is so rich indeed that most visitors to the country are unable to eat it. Two other threshing floors lie out yonder behind the first group of palms, and beyond these, after an open interval, is

[^38]the palm-shaded village where these peasants live. Here they go through their monotonous round of homely duties, generation after generation, and although they have changed their religion twice, from that of ancient Egypt, through Christianity, to that of Mohammed; and their language once, from the ancient tongue now preserved only on the monuments, to that of the Arabs, yet they are in all essential particulars, just what they were when they toiled in the quarries of the pyramid builders. The tombs scattered up and down the valley contain scenes, which show them using the same implements, weaving the same baskets, twisting ropes from the same material, playing the same instruments, and in a thousand ways doing the same things which are common among them now. As we saw in the museum at Cairo, they are also physically just what they have been for ages. Fit only for the life of the herdsman and the tiller of the soil, they continue these immemorial callings, but the vitality which once produced the mightiest works in the ancient world has vanished from their nature, and this is the great and melancholy change, with which we have been so often impressed.

Our next position is given on Map 6 by the red lines numbered 39

> Position 39. Brick maliing, the task of the Hebrews, as seen to-day amony the ruins of Crocodilopolis.

Just north of the chief ancient city of the Fayûm, we stand looking nearly eastward, but a trifle northward also, over the ruins of the ancient city of Crocodilopolis (Map 6). Behind us stretches the Fayûm, rising at last to the vast waste of the Sahara, spreading
out to the far Atlantic, while beyond the trees that mark the skyline before us, the Nile is some twentyfive miles away. Forty-five miles distant on our left is Memphis, while on our right are Thebes and the splendid cities of the upper river. And this is the fertile Fayûm, you ask-these wastes of dust and dried mud! Far from it. The fertile levels of the Fayûm do not differ essentially from those of the rich bottoms in the Nile valley, which you have already seen; hence we shall not spend our time on them. The ruins of the city and the accumulations of débris have raised the surface here to such a height that irrigation is impossible, and the ground is furthermore so cumbered with walls and sub-structures that it is out of the question to think of employing this immediate region for agriculture. It lies open to the burning sun, with nothing to relieve the scorched and parched condition from year's end to year's end. But like every such ruin, it has a story to tell us.

Deep down under these ancient, crumbling walls lie the scanty remains of a town at least as old as the 12 th Dynasty kings, who nearly 2,000 years before Christ recovered this district from the waters of the lake. They built a temple here sacred to the crocodile-god Sebek, after whom the city was called by the Greeks "Crocodilopolis," the city of the crocodile. Though rebuilt by Ramses II some six hundred years later, the temple was not one of the great sanctuaries of the Pharaohs, and the town never rose under them to any great power or political significance. But when the Greek kings, the Ptolemies, came into power, they used the rich fields of the Fayum as gift lands with which to reward their soldiers. The second Ptolemy
(Philadelphus) refounded this town in the 3 rd century B. C., built temples and schools, introduced the Greek language, and completely Hellenized the place. He named it after his queen Arsinoe, whom he made the patron-goddess of the town, and under his protection it rapidly grew until it contained in later times some 100,000 inhabitants. To the houses of this age belong the walls which you see rising almost as far as the eye can reach. The various vicissitudes which later overtook the city, combined to preserve in these ruined houses, just such documents as we should find under your house, if it should suddenly be razed to the ground. Being largely above the reach of the inundation, these documents have lain here undisturbed some two thousand years. They are written upon papyrus, which for many centuries before and after Christ, was the paper not only of Egypt, but also of the whole classic world. They are chiefly concerned with the civil and social life of the time. You find deeds, leases, receipts, bills, wills, transfers, tax-lists and all the dacuments of every-day business life. The letters from one member of a family to another are of especial interest ; a brother writes to his sister, telling of his safe arrival at Memphis; a son writes to his father complaining that the fodder for the livestock, which was to have been sent to him, has not been sent, and demanding that it be dispatched at once; all the matters of every-day life are found in these moldy oll bits of papyrus as they are found in our own letters of to-day.

But more important than any of the letters or the business documents are the monuments of Greek literature which have been discovered in yonder houses and similar cities near the Fayûm. Some

[^39]of the greatest products of Greek thought and literary genius, supposed to have been irretrievably lost, have turned up among such house ruins; such as the Constitution of Aristotle, poems of Sappho, works of Isocrates and Bacchylides, and innumerable fragments of Homer. Many a lost work of the early days of Christianity has also been restored to us from those sombre walls out there; even traditional sayings of Jesus, not found in the New Testament, and many a fragment which throws a flood of light on early Christianity, have thus been reclaimed. Silent and grim, these desolate streets have nevertheless a message for the modern world such as few ancient sites have preserved.

But all this time we have been ignoring a modern industry here directly before us, which is not less ancient in its origins than the beginnings of the city. Almost as far back as we can trace Egyptian civilization, we meet the sun-dried brick. We find it as the material for the earlier royal tombs of some 3400 B . C., far back of the pyramid builders; we have seen it in the pyramids of the 12 th Dynasty (Position 31); we have found it in the store-chambers of Pithom, where the Hebrew bondsmen toiled; the walls of yonder houses of the centuries just before and after Christ are built of them; and finally we see here the modern natives engaged in their manufacture, precisely on the same methods employed by their fathers five thousand years ago. At the extreme right across the road along which the donkey train is passing, the soft mud is being mixed under the feet of a fellah, while another at a table molds it into bricks, two at a time. These are taken while still in the molds and carried to the yard by a third native, who gently detaches them from
the molds and leaves them to dry in long rows, as you see them inside the enclosure on the left. Just to the right of the enclosure are also two pottery kilns, with numerous newly fired jars, many of them broken in firing. The smoke beyond these is from the corn-stalk fuel in another kiln. But to return to the bricks. In spite of the lack of firing they make a very durable wall, and in a practically rainless climate they stand well, as you have already noticed at other places. Here the roofs of the ancient houses are gone, to be sure, having long since been taken for the sake of the wood, but the walls still stand, in places almost to the original top course, in spite of the fact that the natives, and not skilled excavators, have dug out this town in their quest of sebach, as they call the rich dust and débris of these ancient towns, which contains a large proportion of potash and ammonia salts of the greatest value as fertilizer for the fields of the fellahin.

Our next stop is to be nearly a hundred miles south of the Fayûm, and on the opposite or eastern side of the Nile, in order to visit the Benihasan tombs. Find these tombs on our general Map 3. We shall be looking slightly east of north.

## Position 40. The tomb of a feudal lord at Benihasan, built about 1900 B. C.

We have now left Lower Egypt far behind; Cairo is almost in front of us, 167 miles to the north, but a little to the left as we look east of north, and we are almost midway between Cairo and Thebes, which is nearly behind us, 183 miles distant (Map 3). We stand on ground sacred to the great barons and feudal lords of the 12 th Dynasty, in the Middle Kingdom.
Positions 39, 40. Map 3.

The slope of the mountain extends backward and upward above the cornice of this façade, for we are before a tomb hewn out of the solid rock of the cañon cliffs. It is our first view of a cliff-tomb, of which we shall see many, especially when we reach Thebes. Already in the Old Kingdon, the nobles had begun to hew out such tombs, and we might have seen them at Gizeh, had not the greater pyramid tombs there consumed so much of our time; but we shall see some of them from the days of the Old Kingdom, when we arrive at the first cataract (Position 85). But it was only or chiefly the provincial nobles of that time, who made use of the cliff-tomb. By 2000 B. C., however, it had become the prevailing method of tomb construction, and the mastaba, while it had not disappeared, was no longer so common. Thus we shall meet the cliff-tomb as the usual form from the beginning of the Middle Kingdom onward. At this time we find in it all the elements which we noticed in the mastaba, with the modifications necessary in view of the change in the character of the construction, that is, from masonry on the plain to solid rock in the cliff.

That door before us gives access to the chapel-chamber, as in the mastaba; but as it was impossible to hew the secret chamber for the false body, the mortuary statue, out of the solid rock, without leaving one side of it open, it was therefore made as we see here; and the secret chamber thus became an open niche or shrine in the back wall of the chapel. Sitting in this shrine, and really a part of it, for it is hewn from the same rock, is the portrait or mortuary statue of the deceased; and these sculptured portraits of the Middle Kingdom, being thus still attached to the native rock, cannot be removed to enrich our museums like those
which you saw in Cairo, but they have for the most part suffered defacement and destruction in antiquity. The sepulcher-chamber, where the mummy was deposited, is below the chapel, and was reached by a shaft leading from the floor of the chapel vertically downward. Thus, as we have said, all the parts of the mastaba are here present.

This tomb is architecturally interesting. Look at that architrave timber resting upon the tops of the pillars. Would you not imagine it were hewn in wood? But look further at that row of timber ends projecting under the cornice. They are but the imitation in stone, of the ends of the wooden timbers which supported the roof in the wooden structure, unconsciously used by the architect as his model. That wooden structure perished four thousand years ago. What it was-a house, a temple, a storage magazine, we do not know; but certain it is, that of that vanished wooden building some of the architectural details are here preserved to us in this stone tomb. In all probability the pillars, too, are imitated from the same building. They are sixteen-sided, and when first seen by the savants of Napoleon's expedition, they were so struck with their resemblance to the Doric column, that they called them "proto-Doric," thinking that they were certainly the predecessors of the Doric order. This impression was enforced by the timber ends above the architrave, which much resemble a similar detail in Doric architecture called the "mutule." But you notice that this pillar has no capital (and for that reason, I have called it a pillar and not a column), and that it has a circular base, whereas the Doric column has a capital, but no base, springing as it does directly from the pavement. But nevertheless the purity of line and fine
simplicity of this pillar do strongly suggest the Doric column, and it is not impossible that examples of it here and elsewhere in Egypt, may have been seen by the early Greek architects, and may have given them hints which affected the general character of the Doric column. In any case, this colonnade, thrown out before the tomb chapel, is a very effective piece of architecture.

The impression from it is somewhat marred by a very necessary modern precaution, the iron grating, which keeps out the modern native intruder, at whose hands the tombs at Benihasan have suffered sadly in past years. For these chambers have been open to his forefathers for thousands of years, and in this very one before us, one of his ancestors, a scribe named Amenmose, who lived some three thousand years ago, left a record of his visit to the place about seven hundred years after its occupant had been laid to rest in it. He took his pen from behind his ear, where he kept it as modern scribes do, and he wrote upon the wall in a rapid hand the words: "The scribe Amenmose came to see the temple of Khufu, and found it like the heavens, when the sun rises therein." Because the name of Khufu incidentally occurs here, he mistook it for the tomb of Khufu, the builder of the great pyramid, of whom, of course, as a monarch already belonging to ancient history, he had little knowledge; just as an unlettered German of to-day might know very little of his great ancestor, Frederick Barbarossa. For Amenmose the scribe was as far in years from Khufu and his empire, as a modern Italian is from the Roman emperor Augustus.

But who was the man who slept in this tomb? Here are his name and pompous titles written all around
the door. He was Khnumhotep, who lived in the 20th century before Christ. He was one of the most powerful lords of his class; one of those feudal barons of the 12th Dynasty, whom the Pharaoh was forced to conciliate (page 26). They were lords of a town and domain which lay at the foot of these cliffs, but such was their favor that the Pharaoh often united with their domain, also that of another district or nome, opposite this, on the other side of the river. They built their own temple in this town, they placed their own statues there, they mustered their own troops, but placed them at the Pharaoh's service when necessary; they dated events by the years of their own reigns, as well as those of the Pharaoh; in short, they were miniature kings, but under the Pharaoh's more or less immediate control. Here in this cliff they hewed out their tombs, generation after generation of them, and on the chapel walls they depicted, in beautiful painted reliefs, the scenes and occupations among which they moved upon their great estates. We know how they hunted, how they dressed, how they worked and how they played, how they fought and how they worshiped, and it is all on the walls of the chapel, to which this door gives access. Among the scenes in this chapel is one depicting an incident of which Khnumhotep was evidently very proud. It shows him receiving a company of thirty-seven Semitic Asiatics, countrymen of Abraham, who likewise must have lived at about this time. They are led by their sheik, whose name is Absha, a name which occurs in the Old Testament in the form "Abishai," which means father of a gift, so that these people evidently spoke a dialect closely akin to Hebrew. They came to Khnumhotep,

[^40]so the accompanying inscription states, to bring eyecosmetic, one of the products of the farther east of which the Egyptians were very fond, but were obliged to obtain by trade. Below these scenes which cover the four walls Khnumhotep has placed a long biography of himself showing how his line had been favored by the kings of the ruling dynasty from its beginning on to the time of his own sons, then grown men. It is evident that this Benihasan family was a source of strength to the 12th Dynasty, and that its kings rewarded the family accordingly. But we cannot trace them back of the Middle Kingdom.

We are now to visit Assiut, where we shall find a similar family, but of still earlier date. You will locate Assiut on Map 3, about seventy miles south of Benihasan, but on the western bank of the Nile. Our first position there is shown by the red lines numbered 41. We are to stand, you see, with our backs to the modern town and the river and look southwest to the cliffs.

## Position 41. Cliff tombs of the lords of Assiutthe king-makers of 4,000 years ago

We are now 235 miles from Cairo, and 68 miles from Benihasan, where we last stopped. Before us rise the cliffs of the Nile cañon here at Assiut. We shall presently climb those cliffs and look down upon the city now behind us, the largest city of present-day Upper Egypt. We are looking westward; behind yonder desolate bluffs lies the Sahara, the sands of which have drifted down the face of the rocks and closed many a tomb door. On our right is Cairo, on our left is Thebes, while behind us are the river and the eastern
cañon-wall, which we are yet to see from yonder summit. Boldly defined against the distant cliff is the tomb of a modern sheik in the foreground, and its outlines conceal some of the cliff-tombs of his ancient ancestors. But it is those distant tombs that chiefly interest us now. There they rise in five tiers, the second and the fourth from the base being almost entirely covered by sand. The family of nobles who made these cliffsepulchers, first emerge upon history in that dark and obscure period, when the pyramid builders of the Old Kingdom had passed away, and the country was a prey of the barons of just such cities as Assiut, each one seeking to gain the throne against his fellows. When another noble family at Heracleopolis, just south of the Fayûm, known to us as the 9 th and 10th Dynasties, assumed the coveted honor, the lords of Assiut supported their claims. They tell with great pride on the walls of those tombs yonder how they gathered their forces and fought the nomes and districts of the south in defense of their king. They defeated the southerners both in fleets on the Nile, the earliest naval battles of which we know, and on both shores of the river in succession; and although they do not mention their ${ }^{\text {en enemies by name, they show clearly that it }}$ is Thebes which they are fighting. Thus about 2200 B. C., or possibly a little later, Thebes appears for the first time upon our historical horizon. Let us remember, then, that these Assiut tombs mark for us the rise of Thebes. When the earlier chapels up there in the face of the cliff were hewn, Thebes was but an obscure little town of the upper river, but from now on we shall constantly hear of her and her splendid Pharaohs.

When the support of these Assiut barons was no longer sufficient, the 11th Dynasty of Theban nobles

[^41]triumphed, and paved the way for the accession of the 12th Dynasty, who were also of Theban origin, but as we have noted, lived down the river 175 miles from here, near the mouth of the Fayûm, where we found the pyramid of Hawara and the labyrinth (page 163). Of course, the 12 th Dynasty Pharaohs replaced these Assiut barons, who had fought for the house of Heracleopolis, by a family friendly to their own dynasty.

One of the largest tombs which you see up there belongs to a powerful lord of this new family under the 12th Dynasty, named Hepzefi. His tomb is of especial interest, because he recorded upon the walls of the chapel, certain contracts which he had made with the priesthoods of the two temples in the town behind us, by virtue of which they were to furnish his tomb and his statue in the temple, with certain supplies, bread, meat, wicks for illuminations at feasts, and the like, in perpetuity after his death. He diverted to them certain revenues due him as lord of the district, in payment for these things. So fine is the legal sense shown in these contracts, that we find Hepzefi, as baron, making a contract with himself, as priest, in which Hepzefi, the baron, conveys certain property to Hepzefi, the priest. Little did he dream of the time when these contracts should serve as almost our only source for any knowledge of the legal usages of his age, nor of the day when his descendants, on the very ground from which he derived these ancient revenues, should raise beans and lentils, as you see yonder native doing here, with no knowledge of their ancient ancestor, his contracts, or even of the language in which they are framed. He would have been equally surprised had he known that the tombs, which he and
his family had hewn out here, should be used as dwellings by the hermit devotees of a new religion still to be born in Palestine, of whom the first forefather, Abraham, was then living in Hepzefi's day. But such was finally their fate; they were so used for centuries by the Christian ascetics of the vicinity, who were here as elsewhere in Egypt, incredibly numerous. Of these anchorites some became famous, among whom the most widely known was John of Lycopolis ("wolftown"), as the Greeks called this town of the jackal, which was the sacred animal of Assiut.

As we have said, we are now to ascend the cliffs before us, then turn around and look northeast over the modern city and the valley. On Map 3 note the red lines numbered 42 , which show what is to be the direction and field of our vision.

## Position 42. Assiut, the lurgest city of Upper Eyypt, seen from the cliff's at the west

The tombs in the cliff, which we saw from our previous station, are now behind us, as we look off over the town. Beyond the town is the regular white band that marks the river, and the fine white line between the town and the river, at an oblique angle with the latter, is the road from the river harbor to the town, a distance of some three-quarters of a mile. Beyond the river you see the valley, spreading eastward to the distant eastern cliffs, which show in dim gray upon the horizon. Behind them is the rocky waste of the Arabian desert, which rises to a range of granite mountains and then drops to the Red Sea. It is but the continuation of the great Sahara, which lies behind us. Just at this point, the valley spread

[^42]out before us, which the river has cut through the desert, is only some ten miles wide. Between us and the town are the fields, from which the inundation has just retreated, and you observe the black Abyssinian soil, which it has deposited. This valley before us was once a bare trench, floored with naked rocks, and walled in by the cliffs on which we stand. As the centuries passed the river gradually covered the rock floor with mud, until now the soil deposit is here from 33 to 38 feet deep, while in the Delta, which was once a bay of the sea, it is 50 feet and more in depth. On the average it is perhaps less than 30 feet deep, so it has required over eight thousand years to enable the river to lay down is deposit of such a depth, for it rises on the average only about four inches in a century. All those arts, the development of which we have seen so strikingly illustrated, for example, in the pyramids, the organization of men into society and under ordered govern-ment-all this grew up in this valley since yonder stratum of soil was deposited, and could not have made any considerable progress until the soil was deep enough to support vegetation over an extended area. The irrigation of these lands in modern times is much assisted by a great dam, just completed by the English at this point. It contains no less than sixty arches, with a sluice at each end of the whole, and the country between here and the Fayûm greatly profits from the water thus stored. The canal flowing at our feet is one of the important irrigation canals of Egypt, called the Sohagiyeh, because it comes out of the river above here at the town of Sohag. The road which crosses it from the town is the ancient road, which has always led thence to the cemetery where we are.

From the 23 rd century B. C., at least, the dead of Assiut have been borne along that road to be interred in or near these cliffs. The modern cemetery is on our left, just around a bend in the cliffs. The ancient town of the nobles, who hewed these tombs, among which we stand, lies fathoms deep, buried under the accumulations of thousands of years beneath the busy modern town. The lands about the town are owned by men, whose abstracts of title do not reach back to the lords of this district, who four thousand years ago left legally valid contracts assuring to their tombs after death the use of a certain portion of the income of these lands.

The ancient Egyptian lords and the peasantry, who in those remote days here fought and toiled for the princes of Heracleopolis, are long forgotten. In place of their massive temples, now rise the slender minarets of the Moslem mosque, brought into the land by those desert tribes, which these ancient princes despised as barbarians; and where the chateaus of the lords who lived here in Abraham's day once nestled under the palms, are the busy markets and teeming bazaars of the modern town. All that the native still preserves of what was once here, is the name which he applies to the town. "Assiut," or "Siut," as it is also called, is but the slightly changed form of the ancient name of the town, which you will find in these tombs behind us, as "Siyowt" in hieroglyphs four thousand years old. It is a modern city of over 42,000 inhabitants, with a number of important industries, especially the manufacture of a fine red pottery. The tourists from Cook's steamers are quite willing to expose themselves to the blazing sun and to walk up that long road from the

## Position 42. Map 3.

harbor, to which I have already called your attention, in order to buy a few specimens of this beautiful ware in the interesting bazaars. On market days, this road at our feet, and all the others converging in the town, are alive with natives, going up to the town to dispose of their produce in its markets; and like the same scene in other lands it is one of the most picturesque and interesting to be met with on the Nile. You will discover a group of such people just beyond the bridge, but if we could see this road on Saturday, you would be reminded of a trail of ants.

But now we must leave this fine landscape and visit our first upper Egyptian temple. This we shall find at Abydos, about one hundred miles above or southeast of Assiut, on the same side of the river. See Map 3. The temple at Abydos was built facing the river, that is, facing northeastward, and we are to look southwestward across the front. Turn to Plan 7, note the points of the compass as indicated upon it, and get clearly in mind the relation of the temple to the river. This is best done by turning the plan so that its north corresponds to north on the general Map 3. The red lines numbered 43 show precisely what portion of the temple we are to see first.

## Position 43. The Temple of Sethos I-view southwest to its dismantled front-Abydos

As we are looking southwestward here, the river is on our right. Cairo is about 335 miles away on the same side (Map 3) and Thebes is less than a hundred miles distant on our left, if we measure around the great bend in the Nile, which we are now fast approaching in our ascent of the river. Now if you have clearly in
mind where you are, I will answer that question, Why should this temple have been built out here in this desert waste? We are standing, to be sure, as we stood at Gizeh, on the margin of the desert, but there was an ancient town in this valley behind us, though it was of no political importance and would never have been the reason for the erection of such a temple as this. The priests of the modest prehistoric sanctuary of this place, early affirmed that Osiris, the god of the dead and great protector of every soul in the hereafter was buried here, and already at a remote date, the ground on which you stand was the holiest spot in Egypt, as the burial place of Osiris. It was indeed the "holy sepulcher" of Egypt. Every great man desired to be buried here, or, if that were impossible, he erected a tablet on the wall of the ancient Osiris temple, the ruins of which are just out of range on our right. On this tablet he recorded his name and titles and a prayer to Osiris for protection and maintenance in the hereafter. Officials of the court and government took advantage of every official journey that brought them to or past Abydos, to stop and erect here such a tablet for themselves or the deceased members of their families; for it was thought that Osiris was sure to give attention to these petitions erected in the vicinity of his tomb. Thus a certain official under Sesostris III, about 1900 years before Christ, whose name was Sisatet, says on his tablet erected not far from where we stand: "I came to Abydos together with the chief treasurer, Ikhernofret, to carve a statue of Osiris, when the King of Egypt, Sesostris III, journeyed to overthrow Kush (Ethiopia), in the year 19." This tablet is now in Geneva, Switzerland. Now, it is hardly possible that
the chief treasurer, Ikernofret, mentioned by Sisatet, should have visited Abydos without leaving some record of his visit, and sure enough an examination discloses his tablet also, now reposing in the Berlin Museum; and upon it Sisatet is also referred to. The two had stopped here to make a statue of Osiris by command of the king, as he passed here on his way southward to invade Ethiopia in the nineteenth year of his reign. This is the only record we possess of such a campaign in the nineteenth year of this king, and you will thus see how important for Egyptian history these memorial tablets are, especially as in course of centuries they gradually increased in number, until they crowded the temple enclosure just north of us here, in hundreds upon hundreds. They were taken away by Mariette and most of them now rest in the museum at Cairo.

The temple before us carries us into the great Theban period, to which the tombs at Assiut introduced us. It was built by Sethos I, the first great king of the 19th Dynasty, who ruled in the 14 th century B. C. We have seen his face in the flesh in the museum at Cairo, and we remember from our study of his history, his war in Syria. The architecture of this temple is not as imposing as that which we shall find at Thebes, but it is justly noted for the exquisite reliefs which it contains, and these we shall later view. This is not the front of the temple which we have before us, but merely the dismantled and altered back wall of the second court of the temple (see Plan 7). You see at each end of the row of pillars the side walls of this second court; its front wall, which would be out of range on our right, has disappeared, as well as the entire first court and its front, which once formed the
real façade of the temple. Hence we must not judge of the architecture of the building from this rear wall of the second court. When you have seen the temples of Medinet Habu (Position 77) and Edfu (Position 82), you will know what was the character of the lost façade of the temple before us; so that we shall not spend any time upon this point now. Behind that row of pillars are seven doors which once formed the entrances to seven aisles, leading through the temple to seven shrines, of which the middle one was sacred to Amon, the great god of Egypt in Sethos I's time, and the other six to Osiris, the deified king himself, and the other great gods of Egypt. It is therefore a kind of pantheon, and as such, the names of all the nomes, or old baronial divisions of Egypt, are engraved in order by the doors. Thus all Egypt is here recorded as participating in the service of her great gods.

The temple had also another function as a shrine of the earliest Pharaohs, in which their worship was practiced; but of this last particular we shall have more to say when we have entered the building. Sethos never lived to see his temple finished, but on that wall facing us, behind the pillars, is a long inscription of his son, Ramses II, in which he narrates how he found the temple unfinished, with its columns lying on the ground and the blocks intended for the walls, prostrate in the filth; while the temple income which Sethos had founded for the support of the temple and its service, was neglected and disregarded. Ramses tells how he completed the structure and restored its diverted income; and one of the things which he did was to wall up five of the seven doors, which Sethos had constructed behind the pillars; you can clearly see the masonry filling of the three on this side of the centre

[^43]as we now stand. Ramses left only the central door and the furthest one of the three on the other side of the centre (see Plan 7). His long inscription, from which we have given some few of the facts it contains, was then engraved upon the wall thus obtained. It contains no less than 116 lines.

That central door gives access to a wide colonnaded hall, that is, a hall, the roof of which is supported upon columns, and usually called a hypostyle hall. The roofing blocks which rest upon the columns in the first hall are to be seen from here, above the wall behind the pillars. There is a second hypostyle hall behind the first; and in this second hall we are now about to stand. Turn to the plan and note the location of both of these halls with their rows of pillars. Then find the red lines numbered 44 , which show the position we are about to take in the second hall and the direction in which we are to be looking.

## Position 44. Columns of the great Hypostyle Temple of Sethos I at Abydos

For the first time we stand in an Egyptian temple; yet its structure is not of the usual type, and you will find very different arrangements when you visit the Theban sanctuaries. We are now standing at the left (southeast) side of the second hypostyle hall, and looking northwestward between its second and third rows of columns, which close in our view on the right and left ; the second row on the right, the third row on the left. Just behind the third row, that is, on our left, are the seven shrines of Amon, Osiris, the king, and the great gods of Egypt (see Plan 7). That of the king is directly opposite your left shoulder, and if you raise your left arm, it will point directly into the king's
shrine, only ten feet distant. You are therefore looking across the seven aisles leading to the seven shrines, and as the floor before the shrines is higher than that of the hypostyle hall, you observe a series of inclined bridges, leading from the floor of the hypostyle to the higher level. You are standing on the bridge which leads to the king's shrine, but you can count the six others with the exception of the fifth next to the other end, which is destroyed. Eleven of the twelve columns in the row to our left can be counted. The twelfth in the row to our right is almost within our reach. Note the heavy architraves above us; they furnish support for the roofing blocks that cover the hall. But on our left the roof has now fallen in and the fragments have been removed. Hence you see how the sun shines in from the left and the broad shadows of the columns are thrown obliquely across the pavement. It is upon these columns that the architraves rest, as you note especially at the other end. The row at our left shows a very unusual form, each column being a plain cylinder, resting upon a circular base, and surmounted at the top by a square block, without any trace of a capital. On our right, however, the columns are of a very common type, modeled on the bud of the papyrus plant. The bud forms the capital, and the stem of the plant is the shaft, which is not cylindrical, but shows a marked swelling of the lines as it rises, like the entasis of the Greek column. But we can study this column more fully when we arrive at Thebes, where it is common.

The architect's method of erecting these columns is very interesting. When the pavement on which we stand has been laid, the architect, with his

Position 44. Map 3. Plan 7.
ground plan of the temple in his hand, transfers that plan in the full scale to the pavement, drawing the lines which show where the bases of all the columns are to rest, and thus covering the pavement with long rows of circles in red paint. These circles may be found still clearly visible on the pavement, where a colonnade has been destroyed. Upon the circular base, the column is built up in huge drums of limestone, such as you see here in the first column on our left. The architects did employ columns hewn from a single stone, and some of these monolithic columns of granite already made in the Old Kingdom, are of the greatest beauty. But in building these great colonnades of the Empire, so large a number of columns were required that they could not be turned out fast enough to supply the architect. Hence he began to build them up in this way, a method which was more rapid.

The inscriptions and reliefs, with which these columns are covered, concern the king and the gods. The column of hieroglyphs on the shaft behind the native dragoman reads: "Lord of the two lands, Menmare, Son of Re, emanation of all the gods, Lord of Diadems, Sethos (I) Merneptah," which is Sethos' double name and the titles belonging thereto. On the farther columns are figures of the gods belonging in the particular shrine, to which the respective columns, or the aisles they enclose, lead. Yonder tourist seems rapt in an endeavor to puzzle out those ancient records, but like most tourists, he will find it in vain; and if he turns to the descendant of the men who put these writings on the columns, as the tourist frequently does, he will either be imposed upon with extravagant nonsense or receive only a shake of the head.

Position 44. Map 3. Plan 7.

But the most important and interesting record in this temple is in the long, narrow hall immediately behind us as we now stand, and on the right-hand wall as we turn directly about and face in the opposite direction. Turn again to Plan 7 and see what is to be our next position as we study this record.

## Position 45. Sethos I and his son Ramses II worshiping their ancestors in Sethos' great Temple, Abydos

We are now standing in the narrow hall, which opens directly behind our former station. This hall is part of a great addition to the temple proper, extending southeastward from the rear of the main building and forming the short leg of an L (Plan 7). Now, when we have examined the wall relief before us, and noted some other facts in connection with this side building, we shall find that it had a peculiar character and purpose of its own. This relief shows us the tall figure of the king, Sethos I (whom we have seen in the flesh at Cairo), as he stands with extended arm, holding in the other hand a censer, in which we see the flame of the burning incense. He wears the royal helmet with the curling uræus serpent, the symbol of the goddess Buto, the Pharaoh's protectress, on its front. A necklace and a short kilt, worn over a longer transparent skirt, with a lion's tail attached behind, complete his costume. His son, the prince, who afterward became Ramses II, stands before him, reading from a double roll of papyrus, which he holds in his hands. The heavily plaited side lock of youth falls over the right ear, but he wears no head covering. His body is clothed in a long transparent linen garment, which hangs over one shoulder and drops to his ankles.

## Position 45. Mag 3. Plan 7.

What are these two doing? What is the ceremonial in which they seem to be engaged? That little column of hieroglyphs before Ramses just under his hands, reads: "Recitation of the praises by the king's son, the hereditary prince, the first born of his body, the beloved, Ramses." Whose praises is he reciting? In the ruled column before him you notice a number of ovals. These ovals, frequently called cartouches, contain kings' names wherever you see them on the monuments. Here there are three long rows of them, of which the top one is out of our range of vision; the lowermost one contains only the name of Sethos I over and over repeated; but the upper two rows contain the names of the kings of Egypt before his time. Including his own name, there are seventy-six kings in all! Sethos and his son are therefore pronouncing a sacrificial ritual for the benefit of their great predecessors on the throne. This list which they intended for pious purposes alone, is now one of the most important documents known, for the reconstruction of Egyptian history. It begins with Menes, the first king of the 1st Dynasty, at least 3400 years B. C., and ends with Sethos I, in the 14 th century B. C. It thus covers some two thousand years of history, although it stops at a point over three thousand years behind us. Thus you see that this part of the temple was added to the main building as a kind of chapel sacred to the departed Pharaohs-a chapel which was not different in its function and purpose from those chapels which you saw in front of the pyramid and on the east side of the mastabas. They were intended as places where the dead should ever receive food and drink and clothing, and all that they needed for their life in the hereafter. Now a line of inscription over this list of
kings before us states that Sethos is here presenting to his great ancestors on the throne, offerings of bread, beer, oxen, fowl, incense, ointment, fine linen, clothing, wine and divine offerings from his temple income.

A chapel with a similar intent was attached to the great temple of Amon at Karnak, and the three walls bearing a similar list of ancient kings, to whom Thutmosis III is offering, were removed to Paris, where they now are, in the National Library. But this chapel, in which we stand, is of especial propriety at this place, for behind this temple in the desert the kings of the earliest dynasties were buried, and behind this temple there is a pylon or façade, facing their tombs, and a causeway leading out to them. There they have lain for five thousand years; and two thousand years before the Christian era, the tomb of one of them was mistaken for the tomb of Osiris, so that pilgrimages and offerings were made to it, and it was covered with votive jars.

You ought now to give a moment's thought, beyond the purpose and function of these reliefs which have just occupied us, to their artistic excellence. The reliefs in this temple are among the most beautiful in Egypt. Some of them are unsurpassed by any to be found elsewhere. These figures before us, while not the best in the temple, are still beautiful specimens of Egyptian relief, as such sculpture was practiced by the court sculptors of Sethos I's time. You notice how they place a front view of the shoulders upon a side view of the trunk and lower limbs, producing that appearance of disproportionately broad shoulders, which so strikes the visitor on his first acquaintance with Egyptian reliefs. The faces have been much mutilated : also the feet of Ramses, but you can plainly see

[^44]the beautiful modeling of the knees as the sculptor brings out their bony formation. The hands are not very well done from our point of view, and the feet, while often beautifully sculptured, are in Sethos' figure modeled from one foot in both cases, giving him two left feet! But we are dealing with an art which has inherited certain conventionalities, which the artists traditionally respected and would not disregard, although they were the faults of a primitive age then long since past.

From Abydos we now go to Denderah. On the general Map 3 you find Denderah, about sixty-five miles east of Abydos, and on the same side of the river. The red lines numbered 46 show that we are to stand with our backs to the river and look south.

## Position 46. The benutiful Temple of Mathor at Denderah-view south over the remains of a rullished city

Standing before the Denderah temple and looking directly southward, we have Abydos now on our right; Cairo is behind us, Thebes, now but forty miles distant, is before us, while on our left is the Arabian desert. We are stationed, as the map indicated, with our backs to the river, in the hollow of the great bend (see Map 3), after passing which we shall find the river valley lying in a generally north and south line, as it did until just before we reached Assint. Here before us is one of the three best-preserved temples in Egypt; the other two are the Edfu temple and the temple of Philæ. This is, for Egypt, a late temple, as we shall see, but it is none the less beautiful. Its pure and simple lines rise with a beauty and dignity that are felt at the first glance. Let us inquire as to the age
of the building. On the top edge of the cornice which crowns yonder façade, is a Greek inscription, which reads: "On behalf of the Emperor Tiberius Cæsar, the young Augustus, son of the divine Augustus, under the Prefect Aulus Avillius Flaccus, the governor Aulus Fulvius Crispus, and the local governor Sarapion, son of Trychambos, the citizens of the capital and the nome dedicated the pronaos to the great goddess Aphrodite and her fellow gods, in the year (number lost) . . . . of Tiberius Cæsar." The part of the temple which we see, therefore, was built under the Roman emperor, Tiberius, in the 1st century A. D., when Egypt was a Roman province. It is therefore 1,300 years later than the temple of Abydos, which we have just visited. The halls lying in the rear were the work of the later Ptolemies just before Rome acquired Egypt, so that this temple marks for us the transition, from Greek to Roman domination in the Nile valley.

But, of course, there was here a temple to the great goddess, Hathor, patroness of love and joy, whom the Greeks called Aphrodite, long before Greek or Roman ever saw the spot. The earliest inscriptions we have refer to her; her temple existed here in the Old Kingdom; it was rebuilt by the kings of the Middle Kingdom, and enriched by the conquerors of the Empire. The building before us, although unfinished, represents an attempt to create for her a larger sanctuary than she had enjoyed before. In front of this colonnaded hall which forms its present façade, there was to have been an open court, surrounded by a colonnade or portico such as we shall later see at Thebes. Whether the means failed or what may have been the reason for its remaining incomplete, we cannot now say. We cannot appreciate its beauty fully until we know that this is

[^45]not the surface of the ground, which we see before the temple. These heaps and mounds are the rubbish which was once part of a town. The sun-dried brick walls of the houses, which later invaded the temple enclosure clustering around the very walls of the sanctuary, have gradually accumulated as dust and mud, as generation after generation of such houses rose on the ruins of others, which had tumbled down, burned or been destroyed in the sack of war. Gradually such accumulations rose in all ancient towns, until the town no longer stood upon a plain, but upon a mound, known as a "tell" in Arabic, and commonly so designated in many geographical names. You saw such a tell at the city of Crocodilopolis in the Fayûm, and we shall find more or less of such rubbish around every Egyptian temple. It is this rubbish to which we have already referred as being much employed by the natives as fertilizer, because of the potash and ammoniacal ingredients which it contains. As the natives call it "sebach," the diggers for it are termed "sebachin." They have ruined many a site for excavation by their promiscuous digging.

But to return to our temple-the pavement and the base of the walls are far below the surface of these heaps, and hence the temple should appear much higher-nearly twice as high as it now seems. The hall in front, called by the Greek dedication a "pronaos," contains eighteen of those peculiar columns, as you may plainly see by looking through the door. Each column, formerly known as a "Hathor-column," is really a gigantic reproduction of a musical instrument, known as a sistrum, which was a kind of rattle used by the women in religious services in the temples. The shaft of the column is the handle sur-
mounted by a decorative head of the goddess, Hathor, above which is a square representation of a chapel, with a door in front. They are, therefore, now called "sistrum-columns," and are to be found only in the temples of goddesses. You notice that the roof is much lower behind, dropping in two successive stages, through a hypostyle to a chapel, and then to the holy of holies in the rear. You can see the two lion-heads on the outside wall of the second hall, which serve as spouts for leading off the water of the rare rains, which might otherwise streak the once painted reliefs. For you must imagine this temple as painted in the gayest colors. The reliefs show us the foreign kings of Egypt engaged in the ritual of the temple service. It seems strange indeed to see here in Egyptian style and costume the Roman emperors Augustus, Tiberius, Caligula, Claudius and Nero, who thus assume the functions of the ancient Pharaohs.

In the side and rear walls, built in the thickness of the wall, are long, narrow crypts, intended for safe and secret storage of the temple furniture of value. These crypts are twelve in number, and the painting of the wall reliefs in them is almost as fresh as when the work was first done. The massive masonry upon which we stand belongs to an accessory chapel ustally called a birth-house, because one of its rooms contains reliefs depicting the birth of the son of the goddess and her consort, Harsomtons. This son was worshiped in this chapel, and such a birth-house or chapel was commonly attached to temples of this period. Behind its projecting wall here you may see the masonry wall which surrounds the enclosure of the large temple.

[^46]Now, if you can imagine this temple clad in the brightest hues, surrounded by a lovely garden, in place of these sombre rubbish heaps, and looking out from masses of verdure and waving palms, reflected in the bosom of the sacred lake, you may gain some faint impression of the beauty of Egyptian architecture. But you do not find here the element of size which will meet us so often at Thebes, the temples of which greatly surpass this one in that respect.

At last we are about to reach the goal of all travelers, ancient and modern, the plain of Thebes. Turn to our general Map 3 again, and you see that Thebes was situated about fifty miles south of Denderah, and on both banks of the Nile. At this point you note that the river flows northeast. Now we should turn to Map 8 , which gives this district on a much larger scale. Here you find the Nile interrupted by several islands on its way northeast toward Denderah. On its east bank, in the lower right-hand portion of the map, are the remains of the Karnak and Luxor temples, but the larger portion of this storied plain lies, you see, on the west bank. There ruins of many temples are scattered widely over the plain and along the cliffs which border upon it. We are to occupy first a point of vantage on those western cliffs from which we can get a good general view. Find the number 47 in a circle in the upper left-hand portion of Map 8 and the red lines which branch southeast. There at the point indicated by the apex of those lines, upon the crest of the cliffs, we are to take our stand now and look down over the plain and the river.

## Position 4\%. Across the Plain of Thebes and past the Memmon statues, 'from the western cliff's toward Luxor'

This is the plain of Thebes. Can youl conceive that out there on those vacant levels the mighty city stretched its vast length across the plain? The onetime mistress of the world, the theme of Homer's song, the wonder and the admiration of all the nations, the queen of the Nile; all this she was, and more than all the wealth of ancient song or modern rhetoric ever can convey. And yet you sweep the plain with searching eye and are able to discern only here and there what may be a mass of ruins like this near us on our left, or a group of palms sheltering some little village of mud huts, and dotting the plain with increasing frequency as the eye rises to the horizon. For of all the glory of ancient Thebes, there remain only such desolate ruins as this one which you have noticed, and over the ground once occupied by its busy streets are now scattered the villages of the peasants, whose forefathers may have been the citizens of the vanished metropolis; and yet in spite of this fact there are no buildings ancient or modern which can compare in size with the colossal ruins on this marvelous plain. As you know, we are standing on the western cliffs and are looking southeast. We see the river as a light gray band, clearest in the middle of our outlook, some two miles distant. Its course is obscured for us in our present station by the islands which nearly fill the channel (Map 8), and merge with its banks in the background. See how the noble cliffs sweep away from the river there on the east side. We shall later take up our position down there and look up at these western

[^47]cliffs upon which we now stand, and we shall then see how they also retreat from the river in a wide curve.

All the beautiful verdure-clad valley between them is the site of ancient Thebes. It was a city of two quarters, or better, it was two cities, a city of the dead on this western plain and a city of the living on the other, the eastern plain. We know nothing of Thebes in the Old Kingdom, when the pyramids of Gizeh were being built, but the tombs of the local barons who ruled here as the Old Kingdom was passing away, have been found within half an hour's walk of this point. Then you remember how we saw at Assiut the cliff tombs of the barons there who fought against the Theban nobles, in defense of the Pharaohs of the 9th and 10th Dynasties, who lived at Heracleopolis. By the 22nd century B. C. these Theban barons had beaten the Heracleopolitans and their Assiut defenders and set up a new dynasty here, the 11 th, which was then succeeded by the 12 th, likewise of Theban birth, in 2000 B. C. But the Theban Pharaohs of the 12th Dynasty, unfortunately for Thebes, did not reside here, and the little provincial town, which it then was, gained but slightly by the prominence of its lords. Over there where you see those white buildings, the modern hotels of Luxor, on the east bank, there was a small town called Southern Opet, while just out of range on the left was another named "Opet of the Thrones." Each had its modest temple, the nuclei of the great sanctuaries, which were later to rise there. Southern Opet, as I have intimated, is now Luxor, and its neighbor on the left, "Opet of the Thrones," is now Karnak (Map 8). The old god of the place was Montu, who later became the war god of Egypt; but there was another local god, unknown
and obscure in the Old Kingdom, Amon, who now appeared in the names of the greatest Pharaohs of the 12th Dynasty, the Amenemhets. But with the expulsion of the Hyksos, about 1580 B. C., it was again a Theban family which assumed the leading role, and the city which once stood on this plain below us rapidly rose to a splendor and magnificence unknown before in the history of any city in this ancient land. Laden with the spoils of Asia and Nubia, the conquerors of the 18 th and 19 th Dynasties returned to this lovely cliff-encircled plain, to adorn it with the mightiest temples that have ever risen by human hands. Thus it became the first great monumental city in the history of the world. It continued to be embellished by further buildings or additions to the old ones until Roman times. In the height of its glory its fame had penetrated to the remotest peoples. Homer sang of it in the well-known lines:
"Not all proud Thebes' unrivalled walls contain, (The world's great empress on the Egyptian plain, That spreads her conquests o'er a thousand states, And pours her heroes through a hundred gates, Two hundred horsemen and two hundred cars From each wide portal issuing to the wars) ; Though bribes were heaped on bribes, in number more Than dust in fields, or sands along the shore; Should all these offers for my friendship call."
(Iliad ix, 500-508.)
Its wealth and splendor had thus become proverbial. The ancient villages of Southern Opet and "Opet of the Thrones" had long since been joined by intervening buildings, and the giant city had spread far and wide. It must then have been a vast metropolis filling all this

[^48]plain before us and wide stretches now out of our range. of vision on the left, on both sides of the river.

As the nation declined and the seat of power passed to the Delta, the city fell into decay. It was, however, with the invasion of the Assyrians in the 7th century B. C. that its colossal temples fell a prey to fire and sword in a destruction so appalling that it reached the ears of the Hebrew prophet Nahum, who later addressed Nineveh, the already doomed city of the Assyrians, with a warning reminding her of the fate to which she had consigned Thebes; for he says to her: "Art thou better than No-Amon (Thebes), that was situate among the rivers, that had the waters round about her; whose rampart was the sea, and her wall was of the sea? Ethiopia and Egypt were her strength, and it was infinite ; Put and Libya were thy helpers. Yet was she carried away, and she went into captivity: her young children also were dashed in pieces at the top of all the streets: and they cast lots for her honorable men, and all her great men were bound in chains" (Nahum iii, 8-10). The proud city was, however, not annihilated, and headed insurrection after insurrection, until in resisting the institution of the Roman authority under Augustus, the city was taken by the Romans, who laid it utterly waste (30-29 B. C.). It then rapidly degenerated into a mere group of scattered villages, such you now see sprinkled over the plain. Of these, the village of Luxor, already pointed out on the east shore at the left, is the largest, having about 11,000 inhabitants ; but that of Karnak, which has given its name to the neighboring temple of Amon, is for this reason the better known.

[^49]In visiting the ruins of this place, we shall go first to Luxor, then to Karnak, out of range on the left; we shall then return to this western shore and visit the two colossal statues of Memnon, which you see out on the plain on our extreme right. Leaving these, we shall pass to the temple of Ramses II, known as the Ramesseum, which we have had in clear view ever since we have stood on these western cliffs, down yonder on the left of the acacia grove, where the cultivated fields merge into the sand, which has blown over these cliffs into the valley below. Locate the right corner of the tall piece of wall at the further end of this temple, for we shall later stand there and look up toward our present standpoint on the cliffs. One of the tombs in this very cliff will then be visited, after which we shall proceed to the temple of Der el-Bahri, which is in a bay of the cliffs on our left. Having then climbed up here again, to reconsider the relation of all the main points on the plain, and to discuss some details, which we cannot yet take up, we shall turn sharp about and look with backs to the river, into the valley, where the kings of the great Theban period were buried. After inspecting one of these tombs, we shall view the temple of Kurna, then return along the cliffs, where from a point on our right here, but now out of range, we shall look down upon the temple of Medinet Habu, and then descend to visit it. Our itinerary of Thebes will terminate at that point. If you will trace this itinerary on the maps (Nos. 8 and 9 ) repeatedly until you are familiar with the entire route, it will greatly help you to enter into each of the situations, as you approach them, one after another.

Now glance again across the plain to the white hotels of modern Luxor. We are to begin with the temple beside which those modern buildings have grown up. As it is now much sunken in débris and rubbish, and is over three miles distant from our present eyrie on the western bluffs, we are unable to distinguish it. This next position is given on two maps. First you should find it on Map 8, which we have been using. Find Luxor in the lower margin of the map, on the very bank of the river. The red lines there numbered 48 enclose the summary black outline of the temple plan. The plan of this temple is given on a larger scale on Plan 10. Find there also the red lines numbered 48, which show our next position, and what part of the temple we are to see.

## Position 48. Magnificent desolation-the deserted Temple at Luxor, southuest from the top of the first pylon

Silent and forsaken, this noble sanctuary of the Pharaohs lies before us. What would have been the thought of the proud conquerors of the 18th Dynasty, could they have foreseen the tower of this Moslem sanctuary rising in the midst of the temple court, marking a shrine of that faith which grew up among those desert barbarians, whom the Plaraohs despised! The bright Egyptian sun streams through the colonnades and throws their shadows in long, black rows upon the pavement; but no worshiper now moves down the silent aisles, the voice of the chanting priest, the cry of the singing women, are heard no more, and the great god who once sat in mysterious power in yonder secret chamber is forgotten. Of all the natives in the town about us, whose forefathers once worshiped
in this place, not one now knows the name of the divinity who presided here, and the language in which his praise was sung, is forever forgotten anong them.

We are standing at the front of the temple, on the top of the left-hand tower of the "pylon," as the two towers are called, which form the front of an Egyptian temple (Plan 10). We look down the long axis which extends from the front to the rear, dividing the structure into two equal parts. We are, however, on the left or east of that central axis, which is in a northeast and southwest line. We are looking southwestward, parallel, or nearly so, with the course of the river, which we see on the right, flowing toward us from the southwest, its shore distant hardly a stone's throw. Karnak and its great temple are behind us, beyond which the Nile winds on to Cairo, while before us over the palms, we see the next reach of the river along which we shall pass to the cataracts. We face so squarely up the Nile cañon, that we can see neither of its walls, and thus the cliffs on the west side where we stood looking across to this spot, the southern extension of which might be visible if we were to turn slightly to the right, are not to be seen ; they lie out of range exactly in a line with your right shoulder. Among the palm groves out yonder on the shore are the towers of a villa built by a European consumptive, who lives here, to escape the vigor of the northern winter, which drives so many similar sufferers to this land of genial winters.

Back yonder where now stand those beautiful colonnades (in the rear of the temple) there was once a small sanctuary of the Theban Amon. It was built by the Pharaohs of the 12 th Dynasty in all probability; but in the height of the power of the 18th Dynasty,

[^50]Amenophis III replaced it by a more pretentious temple than any which his ancestors had anywhere planned, in so far as we know. On the very spot where the modest chapel of his forefathers stood, he raised yonder colonnaded hall, the columns of which you see massed so thickly in the extreme rear of the temple. Before it he laid out a court, the pavement of which you observe as a bare space directly before the columns of the hall. This court he then surrounded by a colonnade on three sides, right, left and front, the hall forming the rear side. You can plainly see the columns on the left side of the court in two rows, falling almost into our line of vision. This was the usual arrangement of an Egyptian temple, viz.: First a court like that out yonder, followed by a colonnaded hall or hypostyle. But Amenophis was not satisfied with this. He planned still greater things. He began another hall in front, or this side, of the court, the great columns you see to our right, doubtless intending to place another court here in front of the new hall. Had Amenophis finished his great project, we should, in order to enter the temple, have had to pass through a vast court, enclosing the place where we now stand, and then an enormous hall, which would have brought us to the present court yonder. But death overtook him when he had erected no more than those mighty columns, which were to form the centre aisle or nave of his vast hall, the columns you see just here on our right, divided into two groups by the white muezzin tower of the mosque.

Amenophis' son, being a hater of Amon, made no attempt to continue his father's temple to that god, and when his anti-Amon movement had passed, the restorers of the old Amon worship had not the means
to complete the proposed great hall, the largest colonnade ever planned by a Pharaoh up to that time. (We shall find a larger one at Karnak.) They therefore enclosed this central nave with side walls, which have now fallen down entirely, with the exception of three or four bottom courses, thus exposing Amenophis III's giant columns to view. The roof which once rested upon them has also fallen in, but the huge architraves are still in position. Thus at the close of the 18th Dynasty, about 1400 B. C., this temple presented a peculiar appearance indeed, with this long, narrow aisle standing in isolation as a vestibule leading to the court beyond. But with the accession of the 19th Dynasty, Ramses II built a court in front of the great aisle, the court immediately at our feet, in which this modern mosque now stands. Before this court he erected a pylon, or pair of towers, on the left one of which we now stand; while in front of the pylon he placed a pair of obelisks, one of which is just behind us. In order to build this court, Ramses was obliged to destroy a beautiful little chapel of the 18th Dynasty which stood in the way, and the bank of the river was so near, that he was forced to give his building a distinct twist, diverting its axis eastward, to avoid the river (see upper part of Plan 10). This court of his was, as usual, surrounded by a colonnade, of which you observe several columns down there by the headless statue of the king. There are rows of these statues all around the rear of the court, between the columns.

Now if you will look at the plan (Plan 10) of the temple, you will find that rear hall of Amenophis III marked D, his court C, his unfinished hall B;

[^51]while the court of Ramses II, at our feet, is A. Holding this plan before you, turn it round till the apex of the red V (Position 48), which demarks our field of vision here, points toward you, and compare all that we have pointed out, carefully with its location on the ground.

Do you see where the ruin-strewn ground extends to the river beyond the first column on the extreme right? That is our next point of view. We shall stand there (Position 49) and look directly toward our present standpoint and see the copestones, which we now have beneath our feet, with the outer edges just extending into view, and likewise the obelisk now behind us.

On our Plan 10 we find this next position given by the number 49 in the left-hand margin. The lines showing the direction and limits of our vision extend toward the northeast.

## Position 49. The Moslem mosque in the Court of Ramses MI, at Luxor Temple, Thebes

Now we are down again! Do you see the top of the pylon tower, on which we have just stood? It is there on the right of the obelisk, which we so often mentioned as being then behind us. That tower has lost its cornice except at the left end; its fellow, the other tower on the left, is better preserved. Such a pair of towers, called by the Greeks a pylon, usually formed the entrance of an Egyptian temple, the great portal being in the middle between the two towers. Part of the interior is hollow, with a staircase leading to the top. The walls are built with an inward incline as you see. Together the two towers form the front of the court and the façade of the temple. Notice that row of holes made by the later dwellers in this court long after it
had ceased to be used as a sanctuary, that they might insert the ends of the timbers, supporting the roof of their house, of which the tower formed one wall. The other walls of the house were built of brick, sun-dried, and therefore friable. The result we have already noted at Denderah (Position 46). As the centuries passed and house after house fell to ruins out there in Ramses's ancient court, it gradually filled with rubbish and crumbled brick, until the houses of to-day, like yonder mosque, stand upon an accumulation thirty feet deep, reaching almost to the capitals of the columns.

How incongruous it appears with its not ungraceful little tower, where the muezzin calls five times every day to the worship of Allah, in the court of the now forgotten Amon! And all the efforts of the archæologists have not yet succeeded in dislodging these obstinate Moslems. But I am not sure that it would add to the picturesqueness of the whole if this Moslem shrine were banished. Who knows, however, what treasures for the archæologist the rubbish under it may conceal! It covers the columns on that side of the court, corresponding to those which we see here on the left side. Among these, do you discern one quite small column with a fluted top? That belongs to the chapel of Thutmosis III, which Ramses II destroyed and appropriated, in order to build his court.

On the right are the superb columns of Amenophis III's unfinished hall, and you can now see the lower courses of the side wall, with which his successors closed it in. All about us and under our feet is the rubbish of fallen houses, in which the ancestors of these natives before us lived but a generation or two ago.

[^52]We now have the river on oar left and Karnak before us nearly two miles beyond that pylon (Map 8), but we shall in our next view of this temple, stand at a point on our left as we now face, and, turning about, with the river on our right, look directly across our present line of vision, into the court of Amenophis III. On our Plan 10 we find this next position, and our field of vision is defined by the red lines numbered 50 , which start from a point in the left-hand margin, directly above our standpoint 49.

## Position 50. The most beautiful colounade in Egypt-south across the court of Amenophis III, Luxor Temple, Thebes

There is not another such group of columns as these in all Egypt! Look at those fine contours as the shaft rises to the beautiful capital. Each column is a cluster of papyrus buds, which form the capital, while the stems below make up the shaft. The individual stems stand out clearly, as well as the buds in the capital, with the broad, smooth surface below it, on which were painted the bands, conceived as binding the cluster together. Imagine such a colonnade, painted with all the bright hues of the tropic verdure which they represent, all aglow with throbbing color under a tropic sky, and framed in masses of nature's green, as the tall palms outside the court bow languidly over the roof of the porticoes, and you will gain some faint hint of the real beauty of which an Egyptian architect was master. On our left are the giant columns of the unfinished hall. These represent the papyrus flower, its open bell forming the capital, and its stem the shaft. Such columns, as we shall later often observe, were regularly placed on either side of the central aisle of such a hall

[^53]as Amenophis III here planned. The side aisles, here wanting, were then made up of bud columns, not so high as those of the nave, thus producing a clerestory, a basilica roof, the forerunner of the cathedral architecture of Europe. We shall better understand this form when we have seen the great hall at Karnak (Position 58).
The river is on our right, the axis of the temple on our left (see Plan 10 and Map 8) ; we look almost due south (with our backs to the lower river and Cairo) into the noble court, flanked by that forest of columns in its rear. Their bases are all dark except those of one row, which are touched by the afternoon sun. These stand on the left side of the central aisle leading back through that hall and several ante-chambers into the holy of holies ; and down that aisle the august image of the god was borne on those rare occasions when he came forth to celebrate some great feast. Behind that hall, and around the holy of holies are grouped a series of chambers for the priests and the utensils and stores necessary for the temple service. They are not visible from here, but you can find them on the plan. The great altar of sacrifice stood in the court before us in plain view of all; but it has now perished, and in place of the gorgeous procession of the god, a native leads a buffalo to pasture across the sacred precincts of the ancient sanctuary, while another, sitting lazily astride a tiny donkey with its tinier foal behind it, converses with a friend.

We return now to the front of the temple, to a position before the pylon on which we took our first position here. This standpoint is given on the upper part of Plan 10.

Position 50. Maps 3, 8. Plan 10.

## Position 51. The obelisk of Ramses II, and the front of the Luxor Temple (view to the southwest), Thebes

Again we have the pylon of the temple before us. "But it is so surprisingly low," you object. No, only apparently so; we are standing on 25 or 30 feet of débris. Look at that colossus on the right, buried to the breast in rubbish. If we were standing on the temple pavement, that colossus would be some 40 feet high. You may look through between the pylon towers and see the architraves, which bore the roof of the portico around the court, and the capitals of the columns which support them are almost on a level with our heads. It was up yonder on that left-hand tower that we stood for our first view of the temple (Position 48). We are now facing almost exactly as we were then, but the pylon now rises between us and the temple colonnades beyond. The river is on our right, as it then was, and Karnak behind us.

It cannot be said that these unlovely modern brick structures just before us add anything to the impression made by the pylon, of which they obstruct the view; the archæologists, who would be more than glad to remove them and complete the excavation of the temple, have not yet succeeded in their purpose; and these natives, whom we see carrying up water in the old, old way, not being at all concerned for the temple of their forefathers, are at the same time very tenacious of their rights in these mud brick houses in which they live. The excavator has, of course, no more right to remove these dwellings than has the surveyor of the elevated road to remove your house at home, in order to make way for his road, though you

[^54]are vastly more interested in his road, than are these modern Egyptians in the excavations.

We are now near enough to the pylon to observe some of the details which we shall also see elsewhere. Those two openings near the top of the left tower are not windows, as you might suppose. Look below the one on the right, at the bottom, on the left of the obelisk, exactly in a vertical line with the opening, and you notice a sunken panel in the face of the pylon. In this panel against the masonry of the tower was set up a tall flagstaff. It passed up in front of the opening and was fastened there by a large metal clamp which projected from the same. This was the purpose of the opening. These flagstaves, of which there were at least two on each tower, and sometimes four, towered high above the pylon and were each crowned by a tuft of gaily colored pennants. But the flagstaves were not the only adornment of the pylon towers. Notice those relief sculptures on the left-hand tower. All these temples of the Empire are great historical volumes, richly illustrated, in which the conquerors, who subdued Nubia and Syria, have recorded their achievements. These records offer not merely the inscriptional narrative of the Pharaoh's victories, but also vast walls filled with graphic pictures in stone, depicting the various incidents of the battles, sieges, marches and triumphs, in which the king took part. Thus we see here Ramses II charging the enemy in his chariot, and while he draws his mighty bow, he urges his plunging horses directly into the hostile ranks. He is alone, or at most accompanied by his guards and attendants, having been cut off from his army by a clever maneuver of the enemy; and it is

[^55]only with the greatest difficulty that he maintains himself until he is rescued by the arrival of a portion of his forces. He was so proud of his own prowess in this battle, which took place at Kadesh, on the river Orontes in Syria, that he had it thus depicted upon the walls of a number of his greater temples; and one of his court poets wrote a famous composition upon it, which is considered the epic of ancient Egypt.

Besides these reliefs, colored in the brightest hues, the flagstaves, with their brilliant pennants, and a row of massive colossi, of which we can see but one, the front of such a temple is adorned with two obelisks, which stand a little removed from the pylons, one on each side of the entrance. This obelisk before us, like the temple pylon, was erected by Ramses II. Its fellow, which should stand just before that colossus on the right, was removed to Paris in 1832-3, where it now stands in the Place de la Concorde. It is not so high as this one before us, being 75 feet in height and weighing 212 tons. But it gave the French engineers a task worthy of their skill. As this one has not yet been excavated, its exact height is not known. The inscriptions in three columns record the fulsome names and titles of Ramses II, and the dedication of the monument by him to Amon, god of Thebes. This last is in the middle line, and reads thus: "He made it as his monument to his father, Amon-Re, erecting for him two great obelisks of granite." Being of pink granite, it was brought from the granite quarries of the first cataract at Assuan, where we shall later see such an obelisk still attached to the rock of the quarry. It is not as large as the obelisk of Queen Hatshepsut, which we shall visit at Karnak.

But now we must turn to the great ruins of Karnak, which will occupy much of our time at Thebes, and before we begin our study of the ruins themselves, we must glance at our maps.

Turn first to the General Map No. 8, of the "District of Thebes." Find Luxor and Karnak again in the lower right-hand corner of the map on the east bank of the Nile. Note again our first position at Luxor, as indicated by the lines 48 on this map, that we were looking up the river, or southwest, and remember that in our last position at Luxor we were standing only a short distance behind the first position and looking in the same direction. Evidently, then, to go to Karnak we must turn completely around and move down the river, or northeast. Our first position at Karnak is given on this Map 8, Position 52, and shows that we are to be looking northeast, or opposite to the direction in which we looked from our last position at Luxor. As the outline plan of Karnak is so small on this Map 8, we will turn to our Plan 11. which is on a much larger scale. It might be well to turn this plan first so that north, its lower left-hand corner, is away from us, that we may better perceive its relation to Luxor and the river, as given on Map 8. Our first position, 52 , as marked on this plan shows that we are to see the "western avenue of sphinxes."

Position 52. Grand avenue of rams, one of the southern approaches to the temples of Karnak, Thebes

Up to within a very few years, in standing here you would have been looking upon the garden patches of the neighboring villagers, where, rising picturesquely among beans and lentils, you might have descried
here and there the head of a stone ram. So it had been for centuries. But now the government has bought up the necessary ground, and you are able to gain some impression of what such a monumental approach to the sanctuaries of Egypt was like. We are looking, you remember, in a generally northern line (a trifle east), the river is on our left and Luxor is behind us, while hidden behind the palms and the buildings before us, are the vast ruins of the Karnak temple. Some of those palms have invaded the avenue, contributing much to its picturesqueness and beauty. If only all its invaders had been as peaceful and as harmless! For the soldiers of Assyria in plundering bands have marched down this avenue, Persian hordes have swarmed through it, Alexander's phalanxes have trodden it, the legions of Rome have wrecked it, and the image-hating Moslems have shattered its sculptures; until, war-worn and weather-beaten, these scarred and battered forms show little of their former semblance, and you can hardly find a single ram of which the head is still in place. Between the fore-legs in every case a standing figure of the king is carved; you can see it clearly before the first ram on our right. It is often the figure of Amenophis III, the king to whom these avenues are in large part due. He constructed them to connect Luxor and Karnak (see Plan 11 and Map 8). There is another such avenue east of us (on our right), likewise leading to Karnak, and it is connected with ours by a cross avenue. At the other end of our avenue rises the stately portal, erected by Euergetes I (247-222 B. C.). It formed the gateway to the temple enclosure, for when built, a high wall abutted upon it on either side, of which it was the gate. This wall surrounded the whole complex of
temple buildings at Karnak, and we shall later see portions of it. Beyond that portal the avenue of rams continues to the door of a small temple; the continuation of the avenue is not visible from here, but you can see the door of the temple through the portal of Euergetes I, and the pylon towers which rise on either side of it. The tower on the left shows clearly the channels for the flagstaves, which we saw at Luxor, and the openings above them for clamping the staves into place. This little temple was sacred to the god Khons (see Plan 11), the son of Amon, and his consort Mut, and formed with them the triad of deities chiefly worshiped at Thebes. It was begun by Ramses III early in the 12th century B. C., and continued by his weak successors, until they were pushed from the throne by the rising priests of Amon. The temple of Mut, his mother, is at the south end of the eastern avenue of rams, already mentioned as parallel with ours (Plan 11). It is in such a state of ruin that only a few stones remain to mark the ground plan, and we shall therefore not spend the time to visit it, but proceed from here to the great temple, out yonder behind the palms.

This next position (53) is found in the upper lefthand portion of Plan 11. From that point, the rear of the temple, we shall look northwest over the entire length of the great temple of Amon. This position is given also on Map 8 and on an enlarged plan of this portion of the Karnak temple (Plan 12).

## Position 53. The entire length of the gigantic Temple of Amon at Karnali (view northwest), Thebes

As we stand here at the rear of the Karnak temple, looking north of westward along its entire length, let
us think chiefly of topographical considerations. We shall be able to return to this point later and examine the details more closely. Out yonder behind the huge pylon tower which rises at the other end on the left, is the Nile, and on the extreme left and right, you may discern the crest of the cliffs which flank the Theban plain on the other side of the river (see Map 8). That is where we stood for our first view of Thebes (Position 47). Behind us is the Arabian desert stretching off to the Red Sea.

In general the oldest portions of the temple are nearest us here in the rear, and the most recent at the other end. The modest chapel of Amon, built here by the kings of the 12th Dynasty, stood out in that vacant space behind yonder native on that fallen block. It was erected about 2000 B. C., and we do not know of any earlier building on this spot. It was enlarged both in front and rear by the great conquerors of the 18th Dynasty, beginning about 1580 B. C. Their additions in the rear are the walls immediately before us; while those in front extend to the smaller obelisk, or rather to a fallen pylon just behind that obelisk, not visible from this point. On the other side of that obelisk begin the enlargements of the 19th Dynasty, being chiefly the vast hypostyle hall of which you see the tall columns in the middle, the chief marvel of Egyptian architecture. A pylon beyond that hall and forming its front, has fallen into ruin, and is not visible from here. It is called the "II Pylon" on the plan, and was likewise the work of the 19th Dynasty. The pylon which we do see (Pylon I) rising behind the hall is 275 feet beyond it, and is the latest addition to the temple. Between it and the hall is a large court ("great court"), with which structures of an earlier
date are connected. The pylon (I) then, perhaps erected by the Ptolemies a century of two before Christ, marks the completion of this vast sanctuary, some 1,800 years after it was begun. We thus have three great sections of the temple still surviving; the buildings of the 18 th Dynasty, extending from here down to, but not including, the "great hypostyle hall"; then the hall itself as the work of the 19 th Dynasty, and finally the court beyond the hall, terminating in the great pylon (I) as the latest addition to the temple. There are also four pylons on the south of the temple, now out of range on our left (Plan 11), which were likewise the work of the 18 th Dynasty; but they are in such a ruined condition that we shall not spend any further time on them.

From here we shall proceed to the front of the building, that is, beyond that distant pylon tower, which rises on the left, and turning toward our present point of view we shall look down the approach, and through the portal between the (I) pylon towers. This next position is found on the lower left-hand portion of Plan 11. We shall stand at the apex of the lines numbered 54 and look southeast.

## Position 54. Excavating the famous arenue of roms, southeast to the Temple of Kitmak, Thebes

We now stand before the greatest pylon in Egypt, the back of which we saw from the other end of the temple a moment ago. The river is behind us, Luxor and the avenue of rams leading thence are on our right, and we look slightly obliquely down through the main entrance of the temple and down the main
axis (Plan 11). Behind and to the left of that isolated column in the court, you see the gate of the second pylon, through which you may follow the central aisle between the columns of the great hall behind the second pylon, although you are hardly able to distinguish the individual columns which rise on either side of the aisle. But you may even see beyond the hall, for if you will look carefully at the other end of the aisle, just where our further view is cut off by the left-hand tower of this first pylon, you will discern the obelisk of Thutmosis I, which was the smaller of the two which we saw from the other end of the temple (Position 53). That is the earliest monument visible from here, and there the buildings of the 18 th Dynasty begin, and extend, as you saw, to the rear, while all on this side of it (except the tumbled pylon which forms the rear of the hall, not visible from here) is of the 19 th Dynasty or later, that is, from about $1350 \mathrm{~B} . \mathrm{C}$. But this enormous pylon before us is, as we noted when we saw it from the rear (Position 53), the latest portion of the building. It was possibly erected by the Ptolemies, who always favored the old religion of Egypt, and not merely respected its usages and sanctuaries, but themselves built splendid temples to the gods of the land. We shall see one especially notable example when we have visited Edfu (Positions 81-83).

This scene furnishes us another good example of the way in which the rubbish and débris of fallen houses collect before and around and within the temples of Egypt. Look at the towers and see again the rows of holes in which the roofing timbers of such houses were supported. The rubbish all around us is the disintegrated mud-brick of their walls. Excavations have been going on here at Thebes for many years, for
the purpose of clearing all this away, but there is still much to be done. You see that the methods employed are thoroughly modern, the rubbish being removed as fast as it can be taken out, upon a little tramway leading down to the river behind us. Here for ten cents a day, the modern native carries away the remains of the houses of his ancestors, to uncover remains of his still older forefathers, and the avenue of rams, once completely covered, begins to take shape again and emerge from its long concealment.

We have been looking at this place as it was in 1896. Now we shall be permitted to see it as it is to-day, and thus gain some idea of the purpose and method of such excavations. But we should bear in mind that the excavation of a cemetery is:a matter requiring far more accuracy, careful supervision and skill, than the mere clearance of a temple front as we see it going on here. Our next position is to be a few feet to our right as the red lines numbered 55 on Plan 11 show.

## Position 55. Avenue of sacred rams, leading from the river to the western entrance of the Karnak Temple (after excavation)

The tramway now lies piled up in sections beyond the obelisk on the right and, thanks to its efficiency and the native laborers, the rubbish in the avenue has vanished, though it remains in great masses on either side awaiting a future campaign. This obelisk on our right, with the native in a snowy garment striving in vain to puzzle out the writing of his forefathers, was erected by Sethos II, toward the close of the 19th Dynasty (Plan 11). It was Ramses II who erected this splendid avenue of sphinxes, or really of rams, though they are often called sphinxes. The
row on the right is in an unusually good state of preservation, and you observe the statues of the king standing between the protecting forepaws of each ram. The ram was the sacred animal of Amon, the great god of Thebes; and hence his use as the exclusive figure in the sculpture along these Theban avenues, thus expressing in an oft-repeated symbol the god's protection of the king. This avenue doubtless once extended beyond the point now occupied by the first pylon, which was not yet built in Ramses II's time, and led up to the entrance between the towers of the second pylon, which you can see through the first pylon. Here the splendid festal processions of Amon passed up from the river to the state temple; but now it sees nothing more impressive than a straggling line of Cook's tourists, riding up to the gate on such tiny donkeys as this one, now in the avenue; while an eloquent descendant of the Pharaohs, employed for the purpose, discourses learnedly to the unsuspecting travelers upon historical incidents connected with the temple, which never occurred, and of which he knows very little more than his dupes.

This pylon, thus erected across Ramses II's avenue, is the largest in Egypt, being 50 feet thick, 142 feet high, and forming a front no less than 376 feet wide. But it was never completed, and portions of the brick scaffolding used in its erection are still to be found beneath these heaps of rubbish on either side. It was the last work done on this temple so far as we know, and after it was abandoned, the Romans allowed the temple to fall into ruin. The gateway of iron, which stands open before us, is the work of the government for keeping out the natives
and preventing vandalism in the temple. The timbers across the door in the second pylon are also modern repairs, of which we shall have more to say later on. Through these timbers you can see the columns of the great hypostyle hall, and far beyond appears the "east gate" (Plan 11), which forms the entrance to the temple enclosure through the sun-dried brick wall surrounding the entire sanctuary. We saw another gate in that same wall in looking down the "western avenue of rams" (Position 52). That "east gate" yonder is over a third of a mile away, which is the distance between the extreme eastern and western approaches of this enormous temple. We shall presently be able to see the wall to which it belongs, for we are about to climb the staircase that leads up through the interior of the left-hand tower before us, look down into the court that is beyond, and over the great hypostyle hall behind the court; when we shall see the brick enclosure wall ("girdle wall" on Plan 11), far beyond. Find the red lines numbered 56 , which indicate this next standpoint and our field of vision from it on Plan 11. It is also given on Plan 12, an endarged plan of this temple.

> Position 56. The great court of the Kamal Temple seen (southeust) from the top of the first pylon; Thebes

What a scene of desolation! Do you wonder that the destruction of this great city stirred the peoples to the ends of the earth and called forth from a Hebrew prophet a stinging warning to Ninevel that a like fate awaited her? The vengeance of Assyria, Persia and Rome, and the earthquake of 27 B. C. have wrought the ruin before us, and brought low a work which was
the pride of the Pharaohs and the greatest architectural achievement of oriental history, perhaps the greatest of all time.

We are standing upon the northern tower of the first pylon, and looking down the length of the temple toward the east (Plan 11). Behind us is the Nile, on our right is Luxor, and on our left are the cities of the lower river, Abydos, Assiut, Benihasan, Memphis, and the rest, which we passed on our voyage hither. Under our feet, then, is the latest portion of the building, before us the "great court" of somewhat earlier date, leading to the "hypostyle hall" of the 19th Dynasty, behind which you see the obelisk which marks the beginning of the works of the 18th Dynasty. Those two shapeless masses of tumbled stone on either side of that door, once formed the two towers of the second pylon, built by the Pharaohs of the 19th Dynasty as the front of their great hall. They took some of the material, that is, the stones which you see there, largely from the temple of the great heretic Amenophis IV (Ikhnaton), the arch enemy of Amon, who had attempted to exterminate his worship. (See history, pages $30-31$.) This overthrown pylon is one of the most eloquent witnesses of the ruin which overtook the works of Amenophis IV, for you may find on some of these blocks the name of the great reformer's successors, who sympathized in his movement. The last vestiges of their sanctuary to Aton were thus employed by the 19 th Dynasty kings in extending the. temple of the very god whom the reformers had been trying to exterminate. They turned the hated names of the heretics inward; but the fall of the towers has now exposed them in a number of places. This second pylon, when perfect, formed the front of the state
temple, sacred to the state god Amon. It was nearly 350 feet wide, while the door between the towers was once crowned by a lintel block 40 feet 10 inches long, and weighing over a hundred tons. Leading to the door is a kind of vestibule, before which stand two colossal statues of Ramses II. The one on the right is, you see, nearly perfect, but the other has almost disappeared, only one leg and the base still surviving. In Ramses II's time, then, none of these columns before the door had yet been erected, but in all probability the avenue of rams, which we saw leading up from the river, was continued to this door. Then in the days of Solomon's son, Rehoboam, the kings of the 22 nd Dynasty, about 950 B. C., began a vast court here in front of this pylon. We cannot now sweep its full width, but it is 338 feet wide, and from the pylon on which we stand to the other before us it is 275 feet. The Ethiopians of the beginning of the 7th century B. C. (25th Dynasty) then erected a double row of five columns each, in this court before the door. One of them on the right, is still standing, and you may see the fragmentary remains of eight others. It is not clear just what they were intending to make, but it is possible that they planned an enormous hypostyle hall, of which these columns were to form the two rows of the nave; and that they, of course, failed to complete it. For the column still standing is 69 feet high, and a hall of such proportions would be quite beyond the resources of the weak Ethiopian Dynasty.

If you will look over the fallen tower on the right, beginning over the capital of the standing column, you may observe the long, horizontal architraves that supported the roofing blocks of the hall behind the first pylon. Now those architraves are supported upon

[^56]columns; but the columns at the sides of the hall are not so high as those which you see as you look down the central aisle or nave. You saw the capitals of these lower side columns in our first view of the temple from behind (Position 53). On the left, but now out of our range of vision, is the other half of the hall, corresponding to that of which we see the roof on the right. On the morning of the third of October, 1899, between eight and nine o'clock, two of the watchmen of the temple were standing outside this hall on one of the heaps of rubbish to the north of it, now out of range on our left, when they were startled by a thunderous fall in the temple, and turning toward it, they saw the capitals and architraves at the back of the hall on the north (or left) side toppling over toward the pylon before us. As the falling columns struck their fellows, these in turn fell, and the two watchmen running wildly toward the scene of the catastrophe, arrived just in time to see the last pair nearest the pylon crashing against it as they were hurled down in their turn. In all eleven columns fell, three were drawn partially over, and seventeen massive architraves were brought to the ground. You may gain some idea of the weight of these architraves if you will look at those still resting upon the tops of the columns on the opposite side or right of the central aisle. The cause of the catastrophe was partially the insecure foundations, and the age of the columns, but chiefly the mistaken policy of allowing the waters of the inundation to penetrate into the temple, a policy due to the French Service des Antiquitiés, then, as now, in charge of the temple. The débris from the fall has now been removed from the hall, and
the government is spending large sums of money in replacing the columns as they were before, an undertaking which will cost several hundred thousand dollars before it is completed. The cost of resetting these eleven columns and raising to their places the seventeen architraves in modern times, will serve to give you a hint of what it meant for an Egyptian king to erect such a hall as this with its 132 columns, of which twelve in the middle are vastly larger than those which fell. The shock of these falling columns as they struck this second pylon was such as to endanger its already unstable masonry still standing on either side of the door, and hence the engineers have inserted the timber braces which you see in the doorway.

The great hall and the middle portions of the second pylon nearly shut out from view the older works of the 18th Dynasty beyond, but we have already called your attention to the obelisk of Thutmosis I , seen down the middle aisle. The other obelisk, the taller of the two, may, however, be seen peeping over the top of the left tower of the pylon. We shall look at these monoliths more closely later on (Position 59). Back of the fallen right-hand tower you observe the sundried brick wall which encloses the entire temple. You will remember that we saw the "east gate" of this wall as we looked down the central axis of the temple from in front of the first pylon, our last position; but that gate is now hidden by the left tower of the pylon before us (Plan 11). Outside the wall you see the fields and groves of the peasants, just as they must have been in the days of the old Thebes, and behind them rises that other wall, which we have seen so often, the distant wall of the cañon, which encloses all Upper Egypt.

[^57]And now we shall take our station in the great hall, the architectural wonder of Egypt. We shall stand at the other end of the central aisle or nave, with the smaller obelisk just behind us and a little to the left, and look through the nave toward this pylon on which we stand. This position is given only on Plan 12. You find our standpoint near the centre of the plan, the encircled number 57 , with the red lines extending toward the left or northwest.

## Position 5\%. The famous colonnade of the great Hypostyle Hall in the Temple of Karnak, Thebes

Here we stand beneath the greatest columns ever erected by the hand of man. Look at that pygmy human form out yonder at the other end of the aisle, and then set it against these tremendous shafts. What a feeling of littleness as the eye soars aloft amid this forest of giant forms, each bearing its mysterious legend of a forgotten past, of vanished power and splendor, of which there is now no whisper in all the great silence round about us. Through the roofless nave the sunlight streams in and throws vast black shadows athwart the aisle, in marked contrast with the bright, serene sky against which the capitals are so sharply outlined. Do you know that you could place a hundred men, standing upon each one of those capitals? Twelve hundred men upon these twelve capitals! Perhaps this may convey some idea of their size as the dimensions in figures cannot do. But you will want the figures. These columns are 65 feet high, 35 feet in circumference and over 11 feet through. It is a fortunate thing for the

[^58]government treasury that these were not involved in the catastrophe of October 3, 1899.

We shall not understand this great hall unless we know just where we are standing. Recall what we said as we were leaving our last point of view out there on the top of the first pylon; and look again at the plan of the temple (Plan 12). You will see that we are looking westward, down the main aisle of the great hypostyle hall. Behind us and a little to the left is the obelisk of Thutmosis I, on our left is Luxor, before us at the other end of this magnificent nave is the door which we saw from the top of the first pylon, beyond it the great first court with just the edge of the capital of the sole standing column showing at the left side of the door, through which one of the towers of the first pylon appears, balancing the other barely visible at the right side of the aisie. We see the rubbish still encumbering the door of the first pylon yonder, to which leads the avenue of rams from the river, and a lone palm on the river bank is clearly defined against the cliffs on the other side of the river, where we stood for our first view of Thebes (Position 47). These blocks upon which we are standing belong to the third pylon, which forms the rear wall of the great hypostyle hall. It is the last work of the 18th Dynasty in the temple, having been built by Amenophis III. At his death it formed the front of the temple and remained such until the beginning of the 19th Dynasty, when the great hall before us was undertaken. We shall see more of it later, but as it marks the transition from the 18th to the 19th Dynasty we should carefully note its position behind this great hall (Plan 12).
Position 57. Maps 3, 8. Plan 12.

Now we shall move back behind the sacred lake and view the hall in its entirety. This next standpoint is given on Plan 11. We stand as the encircled red number 58 shows, on the south side of the lake, and look nearly north across it to the great hypostyle hall.

## Position 58. Looking across the Sacred Lake (N.N.W.) to the great Hypostyle Hall of Karunk, Thebes

Here we gain a better idea of the relation of the gigantic aisle where we have just stood, to the rest of the building. We were stationed, at our last point of view, just back of those two columns which stand out so prominently at the hither end of the aisle (Plan 11). We are now looking obliquely across that aisle, nearly northward. There are the two obelisks which we saw from the rear of the temple (Position 53), back of the hall as they should be. The side aisles of the great hall now spread out on each side of the central aisle in clear view before us. Especially on the left you can see row after row of architraves with the capitals of the supporting columns beneath them, each capital crowned by the square abacus block upon which hidden behind the walls which once enveloped them the architrave rests. The side columns themselves are entirely, but have now partially fallen, exposing the capitals sufficiently so that you can see that they are bud capitals, contrasting with the broad spreading flower capitals of the central aisle. We shall notice both sides often as we proceed, but the arrangement here, with flower capitals in the middle and bud capitals at the sides, is the usual one, and should therefore be particularly remarked. Now these side columns are

[^59]43 feet high, 20 feet 8 inches in circumference, and nearly 7 feet through. Those of the middle aisle are 22 feet higher, and the resulting difference in the height of the roofs over the middle and side aisles, which we call a clerestory, is utilized for the insertion of a row of windows, which you see here on either side of the middle aisle, above the roof of the side aisles. These were filled with gratings cut from limestone, but only one of these gratings is now preserved. It is on the other side and concealed from us by the tops of the middle columns. You will immediately recognize in this arrangement the basilica hall of Roman architecture and the columned nave and side aisles of the early European cathedrals. The earliest example of this form is the central aisle of splendid columns erected by Amenophis III, which you saw at Luxor; but you will remember that the side aisles are there lacking, as it was never finished. If you will turn back to those Luxor columns you can now better understand them than before. It is evident, therefore, that Egypt furnished Europe and the later world with this beautiful architectural form, and if we owed her nothing else, this single contribution would be plentiful cause for gratitude and recognition.

We have spoken of the vast size of the central aisle and its supporting columns, but what of the entire hall itself? Its roof is supported upon 134 columns of which twelve in two rows of six each occupy the middle aisle, while 122 are equally divided between the two sides. When we remember that the side columns are each nearly seven feet through, and the middle ones nearly twelve, it will be evident that such a host of colossal shafts must of themselves demand an enormous amount of room if set at a proper distance apart.

[^60]The great hall is therefore 170 feet by 329 feet. It does not seem possible, as we look upon it from here, but we could put the whole cathedral of Notre Dame in Paris into this hall and have plenty of roon to spare. And we should not forget that this is but one hall of the temple, occupying less than one-seventh of the entire length of the building. (See Plans 11 and 12.)

Our view is much interfered with by those great heaps of rubbish which we find here at the side, as we found them in front of the temple, but they are being gradually removed, and there will some time be an unobstructed view of great beauty from this point. The south wall of the hall, which appears above the rubbish on the extreme left, is filled with the most interesting records of Ramses II, especially the poetic narrative of his brave defense at the battle of Kadesh, which we found depicted in the reliefs on the pylon of the Luxor temple. Abutting upon that wall you see another which is continued out of range of vision on the left. Parallel with it, between it and the lake, you can just discern the line of another, a corresponding wall, which, with the first, forms an enclosure leading up from the southern pylons (pylons VII to X, Plan 11), which we do not stop to view, owing to their ruined condition.

This sacred lake, now merely a wallowing pool for the buffaloes of the neighboring peasantry, has been the scene of the most gorgeous pageants, when the victorious conquerors of Syria returned to celebrate their triumphs in the state temple. In his glittering barge. resplendent with gold and precious stones, the god was borne around this lake, followed by a long line of gaily decorated boats carrying the king, the white-robed
priests and crowds of the royal favorites who had gained military distinction in the Syrian wars. Great heaps of costly plunder, the richest wealth of Asia, were piled upon these shores to delight the eye of the god, while lines of wretched captives stood waiting to be led into the temple, there to be sacrificed before him. In those days this lake was lined with lotus flowers and other water lilies, rich masses of nodding palms were mirrored in its crystal surface, while all around were gardens filled with strange and rare plants, brought by the conquerors from the extreme limits of their distant conquests. But now where once floater the Pharaoh's royal barge, the buffaloes stir up the muddy pool and dirty little urchins throw stones into the turbid waters.

But we must now look once more into the great hall, and then turn our attention to the two obelisks yonder. Do you see that fragment of wall which cuts off about half of the smaller obelisk, leaving only the upper half visible? That piece of wall is part of the fourth pylon. Glance at its relative position on Plan 12, for we are about to take position upon it for another view down the central aisle of the great hall. This position is indicated by the lines numbered 59 on Plan 12.

> Position 59. Middle aisle of the great Hypostyle and the obelisk of Thutmosis I, from the top of the fourth pylon, Karnak, Thebes

Here we gain a more comprehensive view of the nave of the great hall than we had when we stood down there on the third pylon (Position 57) ; for now we can also see the right-hand row, which is much better preserved than that on the left, the capitals of which

[^61]have been shattered, probably by fire, while the further four on the right are almost unblemished. The first two, one on each side, have been repaired at some period, with rough masonry, which has never been dressed down. The columns must not be judged by these two. The four nearly perfect ones on the right convey very effectively the grandeur and sombre beauty which an Egyptian architect understood how to express in his great colonnade. Here you see more clearly than before, that they are papyrus flower columns, such as regularly occupy the central aisle of such a hypostyle. They are in grace and contour perhaps not equal to the magnificent columns at Luxor, which Amenophis III erected there, with the purpose of building a hall similar to this; but their mere size alone is a potent factor in the tremendous impression which they convey. See those vast architraves each supported on the square block, or abacus, resting upon the capital of the column. These architraves upheld the now vanished roof, of which a few fragmentary pieces may be seen lying upon them. This roof was 75 feet above the pavement, but all has now been shattered and hurled to the floor below by the successive destructions of Assyrian, Persian and Roman; and what the hand of man could not destroy the earthquake has laid low, until the columns rise in nakedness to the sky, flooded with sunshine, whereas the architect intended them to be seen in the sombre half light that was dimly diffused through the great hall. That light came through grated stone windows, of which you notice the row on the left, on a level with the capitals, but so foreshortened that you may not recognize them as the ones that you saw across the sacred lake. The corresponding row on the other side is hidden by
the obelisk, though you may see this end of it projecting on the right of the obelisk. These windows, as you observed before, occupy the difference in level between the higher roof of the central aisle and the lower roof of the side aisle, and form a clerestory.

Our first point of view in this hall was just on the other side of this obelisk (Plan 12), on the ruins of the right-hand tower of the third pylon; but we are now standing on the left-hand tower of the fourth pylon. This handsome obelisk of Thutmosis I we have seen several times before, the first time having been from the rear of the temple (Position 53). Note how the falling of the heavy masonry from the pylon where we stand has split off a corner of the shaft as it smote the obelisk. You have been struck by the large and beatiful hieroglyphs of the middle column. These are the dedication inscription of Thutmosis I, early in the 18 th Dynasty. The side columns of smaller hieroglyphs are additional inscriptions of Ramses IV and Ramses VI, which they have inserted here, upon a monument which did not belong to them. An obelisk should have but one line of inscription down the middle of each face like that of Sesostris I, which you saw at Heliopolis. But the decadent Ramessids of the 20th Dynasty were unable to erect obelisks for themselves, and were obliged to appropriate those of their ancestors. There is no more graphic evidence of the decline of Egypt under the 20th Dynasty than such monuments as these.

Just behind us as we stand here on the fourth pylon is a ruinous hall in which stands the tallest obelisk in Egypt. Our next position is to be a point behind us and to our left, from which we shall look northeast

Position 59. Maps 3, 8. Plans 11, 12.
across this hall. The red lines numbered 60 in the middle portion of Plan 12 give this next position.

## Position 60. The tallest obelisk in Egypt, erected by Queen Makere (IIatshepsut) in the Karnak Temple at Thebes

We are now looking northward with the sacred lake behind us, and a little to the right; on our left with just the northernmost corner showing, is the great hall, above which rises the smaller obelisk over the intervening fourth pylon (Plan 12). Those tottering blocks just on the right of the smaller obelisk formed our rather precarious footing, as we looked down into the great hall just now (Position 59), and you see again the shattered corner of the obelisk, which we had before us as we stood up there. This fourth pylon was built by Thutmosis I, and formed the front of the temple during a large part of the 18th Dynasty, until Amenophis III erected his pylon, now the back of the great hall, later built in front of it. At what was then the front of the temple, Thutmosis I erected the obelisk we see still standing there, but its fellow has fallen. It stood at the other side of the survivor, which is 76 feet high and 6 feet square at the base. We have the biography of the architect, an official named Ineni, who raised these obelisks of Thutmosis I, preserved in his tomb on the other side of the river. He says of his work: "I superintended the erection of the two obelisks. . . . built an august boat of 120 cubits (about 200 feet) in length and 40 cubits (about 67 feet) in width, in order to transport these obelisks. They arrived in peace, safety and prosperity and landed at Karnak." This, of course, refers to the voyage from the granite quarries at the first cataract, whence
the shaft was brought hither. It will be seen that it required no mean boat to float such a pair as this down the river.

The location of the large obelisk to our right is very unusual, for you see it stands here behind the fourth pylon. Indeed, as we shall now explain, it stand's in a colonnaded hall. Behind this fourth pylon, but now just out of our range on the right, is a fifth pylon, also built by Thutmosis I. This he built first, and afterward erected the fourth here on our left. In the space between these two pylons, that is, the space directly before us, where we now see the great obelisk and its fallen fellow, he raised a fine colonnaded hall, which served in his time as the hypostyle hall of the temple. Fragments of inscriptions on his columns show that they were originally of cedar, the only reference to wooden columns in any Egyptian temple. But they were afterward replaced by stone. In this hall on a certain solemn feast day, when Amon came forth in gorgeous procession, the young and obscure prince who afterward became Thutmosis III, the greatest conqueror in Egyptian history, was nominated as kingby a special oracle of the god, who stopped before the young prince as he stood in the ranks of the priests, and designated him as the future king. Of course, this was all done by connivance and plotting of the priesthood. Under Thutmosis I's daughter, Makere (often called Hatshepsut or Hatasoo!), this hall suffered strange alteration. She placed her obelisks in it, although she was obliged to unroof it, and to remove many of the columns in order to do so. She had them brought in from this side over the spot where we now stand, and all the columns on this side of the hall, some of those on the other side, as well as the side

[^62]wall behind us, had to be taken down in order to introduce and crect the obelisks. She tells with great pride in an inscription on the base of the standing obelisk yonder, how she did it all in response to an oracle of the god Amon, and states that the obelisks were taken from the quarry in the brief space of seven months. As it now stands the great obelisk is $97 \frac{1}{2}$ feet high and $8 \frac{1}{2}$ feet square at the base, being the largest obelisk in Egypt, but not the largest known; for the queen's brother and rival for the throne, Thutmosis III, brought to this temple an obelisk $105 \frac{1}{2}$ feet in height, which was finally erected by his grandson, Thutmosis IV, but was afterward carried to Rome, and now stands in front of the church of St. John Lateran. The obelisk before us is over 20 feet higher than that of Thutmosis I, and weighs some 350 tons. Of its fallen companion only this upper part before us survives, but it gives you an opportunity to examine the pyramidal point at the top. This pyramid was covered with electrum, an alloy of gold and silver, which, glittering in the sun, might be seen from afar on both sides of the river, as the queen states in her inscription.

You will see, then, that the erection of these obelisks having caused the dismantling of the temple hypostyle, it was therefore necessary for the kings of the 19th Dynasty to erect a new hypostyle in front of this, which they did, producing the great colonnaded hall which we have already visited. Thutmosis I's columns were not replaced here until the time of his grandson, Amenophis II, some forty years after the queen took them down. But they have all fallen again, and their bases are covered by the rubbish, beneath our feet. You can distinguish the entrance between
the two towers of the fourth pylon in a line with the head of that native in the white garment and between that line and the fallen obelisk. That entrance was erected by the architect Ineni, of whom we have before spoken, and he says of it: "I superintended the erection of the great portal named 'Amon-is-Great-in-Height'; its huge door was of Asiatic bronze, whereon was the Divine Shadow (the figure of Amon) inlaid with gold." All such pylon entrances as we have seen, were closed with enormous doors of bronze, or of cedar overlaid with bronze, inlaid and chased with gold and electrum. That door looked down a central aisle, the columns of which were like those of the great hypostyle, but, of course, smaller. You must imagine it as leading directly across our line of vision between the standing and the fallen obelisk. The aisle then led through a smaller, now totally ruined hypostyle, out of range on our right, then through a smaller pylon (the sixth), and some small ante-chambers, to the holy of holies. (See Plan 12.)

We shall now be able to return to our first view of the temple and notice more intelligently some of the facts and details connected with the various parts. See the red lines numbered 53 , starting near the right-hand end of Plan 12.

## Position 5.3. (Return.) The entive length of the gigantic Temple of Amon at Karnali, Thebes

We have stood here before, but we shall now be able to understand the relation of the various parts as we could not do at first (Plan 12). That pylon tower on the left in the distance, is over 1,200 feet away;

[^63]that is, this gigantic temple is nearly a quarter of a mile long. Between it and our present point of view are the additions and enlargements of 1,800 years. What would you think of a European building which had been 1,800 years in course of construction? Why, the whole span of European history is scarcely more than 2,500 years. Here in these expanding halls we see embodied the career of the Egyptian nation, dynasty after dynasty, till it closes with the Ptolemies in that vast pylon nearly a quarter of a mile distant. If you will look beyond the queen's obelisk you will notice that none of the columns of the side aisles on that side is visible. That is where they fell in October, 1899, but on the left over the top of the queen's fallen obelisk, you can see them in rank on rank. Just behind this vacant space, behind the turbaned native, where the original chapel of Amon stood, is the Holy of Holies, exactly in a line with the queen's obelisk, where you see one of the roofing blocks lying aslant ready to fall to the floor. Those few blocks that rise just this side of the queen's obelisk are a part of the fifth pylon, which formed the rear of Thutmosis I's hypostyle hall, in which the queen erected her obelisks. After she had thus defaced her father's hall, Thutmosis III would not attempt to restore it, nor was he willing to build a new hypostyle in front of his father's obelisks, as the 19 th Dynasty later did. He therefore built a great hall here in the rear of the temple, with many adjacent chambers, and a holy of holies of his own, thus really bringing the front of the temple to this end and inverting it. He has left extensive records of his conquests in this temple, especially a long series of annals, occupying the walls of a gallery around yonder holy of holies. On our extreme
left in the middle distance are some of his small chapels, of which now only the bottom courses remain. They belonged to the main temple, and one of them was devoted to the service of his ancestors, and contained a long list of the earlier Pharaohs, which has since been removed to Paris, where, as already mentioned, it now is in the National Library.

We shall now visit one or two of the more important records in this sanctuary, which will show us what a great historical volume such a temple is. We shall go first to some inscriptions not far away to our right. See the lines numbered 61 in the right-hand portion of Plan 12.

## Position 61. Plants and animals brought to Egypt from the Pharaoh's cumpaigns in Syriat, Karnat, Thebes

This is one of the most interesting records which Thutmosis III has left us in this temple. We are in a chamber just north of the new Holy of Holies built by Thutmosis III in the rear of the temple (Plan 12). Here he has had his artists depict upon the wall the plants and animals of Palestine and Syria, which he brought back with him from his campaigns there. This is the oldest collection of the flora and fauna of these countries in the world. If they could be properly collected, published and studied by specialists, doubtless many of them could be identified with the life still surviving in those countries at the present day. For here they are, just as they were found among the hills and valleys of Palestine nearly 3,500 years ago. At the other end, now out of our range, is Thutmosis III's inscription about them; he says: "Year 25, under

[^64]the majesty of the king of Egypt, Thutmosis III, living forever. Plants which his majesty found in the land of Syria. All plants that grow, all flowers that are in the Divine Land (which were found by) his majesty, whe! his majesty proceeded to Syria to subdue the countries according to the command of his father, Amon, who put them beneath his feet. . . . His majesty said: 'I swear as Re loves me, as my father Amon favors me, all these things happened in truth. I have not written fiction as that which really happened to my majesty. . . . . My majesty hath done this from desire to put them before my father, Amon, in this great temple of Amon, as a memorial forever.'" And they are still a memorial of the remarkable king who put them there. How the men, women and children, urchins exactly like these lads who bring us our drinking water, must have crowded the streets of the old city, now lying buried all around us, to see these strange and wonderful products of distant lands, which their king had now conquered. And with what interest they must have crept into the temple gardens, to enjoy them there around the now desolate sacred lake. The king tells us that on his return from his first campaign he celebrated no less than three great feasts of victory in this temple, and it was with such things as these that he made those feasts splendid and marvelous in the eyes of the Theban multitudes. Imagine how he must have enriched this temple with the plunder and tribute collected during seventeen campaigns in Asia.

But there are other records which await us in this great building, and to these we now go. Find the lines numbered 62 on the north side of the great hypostyle hall on Plan 12, which give our next position.

Position 61. Maps 3, 8. Plans 11, 12.

## Position 6\%. War reliefs of Sethos 1 , on the morth wall, outside the Hypostyle of the Karnak Temple, Thebes

What splendid action the ancient sculptor has caught and put upon this wall! We can almost see these battles of forgotten wars as they are thus depicted before us. We are standing outside of the great hypostyle of Karnak, looking southward, or nearly so, against the outside of the north wall, as you know from Plan 12. Behind this wall is that vast forest of columns, which we have already viewed. The wall has suffered much, and several blocks are cut out, as you see. In three rows, one above the other, Sethos I, whom we saw in the flesh at Cairo, the father of Ramses II, has here depicted the victories which he won in the first years of his reign, in the middle of the 14 th century B. C. The top row is almost out of our range of vision, and is also very fragmentary. It contained his war in Syria. This is also the theme of the lowest row, where we see the Pharaoh with drawn bow, standing erect in his chariot, as he charges the fleeing Hittites. We shall be able to follow best the middle row, in which Sethos is doing battle with the Libyans, who have crossed the northwestern border and invaded the Delta. On the right we see him with the reins of his plumed war-horses tied tightly about his waist, as he urges them in wild career, full into the ranks of the enemy. He has exhausted his arrows, and holds his now useless bow in his left hand, while in his uplifted right, he grasps the heavy bronze sword, with which he is beating down the Libyan chief, who has dared to face him. The Libyan may be recognized by the two feather plumes which he

[^65]wears on his head. On the left in the same row is another incident in the battle, where Sethos, now dismounted from his chariot, raises on high the javelin, with which he is about to transfix the Libyan chief, whom he hurls back helpless before him. This is one of the most spirited compositions in Egyptian art, and is unsurpassed by anything of this class to be found before the sculpture of the Greeks. According to the canons of Egyptian art, the king must be represented of heroic stature, towering like a giant above his enemies.

Beneath his feet in this last scene he tramples an enemy whom he has just overthrown, and behind him you may discern the figure of a young prince, standing between Sethos' leg as it is planted upon the head of his fallen enemy and the half chariot wheel behind him. This young prince is Sethos' son, who afterward became Ramses II. But a close examination shows that the prince's figure is not original, and a minute study, though you may not be able to make it out from here, demonstrates that Ramses's figure is carved over that of another prince, which is also not original. We thus have a most interesting bit of oriental romance and court intrigue, otherwise long since forgotten, which has left its traces on this wall. For it is evident that after Sethos had finished these reliefs, his eldest son and heir to the throne, desired to have it made public that he had taken part in this battle. He therefore caused his figure to be inserted here behind his father. Whether he had really been present in the battle or not, is, of course, uncertain. Then there arose a conflict between this crown prince and the prince Ramses, each plotting against the other to obtain the throne. Ramses was successful, and at
the first opportunity he had the figure, name and titles of his rival erased here, and inserted his own. But the erasure was carelessly done, and sufficient traces remain to betray the whole affair. We thus see how much these walls have to tell us of the days when Egypt was master of the land which Israel, just at this very time, was going up to possess. But Egypt's hold upon Palestine in Sethos' time was no longer as firm as in the days two centuries earlier, when Thutmosis III brought back from there those plants and animals which we saw but a moment since.

We are now going to view a monument of the days when Egypt had long since lost her possessions in Palestine. It is found on the south side of this great hall. Find the lines numbered 63 on the lower lefthand portion of Plan 12.

## Position 63. Records of the campaign of Shishak, who captured Jerusalem; relief at Karnali, Thebes

We are now on the side of the great hypostyle, opposite that on which we found the reliefs of Sethos I; that is, we are south of it and looking northward, and the wall just before us is at t'ee south end of the second pylon, which forms the front of the great hall (Plan 12). Just here begins the huge first court and extends westward, that is, toward our left, with all the additions that followed after the 19th Dynasty. Thus these reliefs before us belong to a period long after that of the builders of the great hall. They were put here by King Sheshonk, who is called Shishak in the Old Testament, the first king of the 22 nd Dynasty, who began to reign about $9+5$ B. C., that is, at about the time of the reign of Solomon. He desired to recover Egypt's

[^66]conquests in Palestine, which had been lost by his predecessors, and the Old Testament tells us how he went up and captured Jerusalem in the days of Solomon's son, Rehoboam. It says: "And it came to pass in the fifth year of King Rehoboam, that Shishak king of Egy.pt came up against Jerusalem: And he took away the treasures of the house of the Lord, and the treasures of the king's house; he even took away all: and he took away all the shields of gold which Solomon had made" (I Kings xiv, 25-26). In Chronicles it is stated that he also "took the fenced cities which pertained to Judah" (II Chron. xii, 4). Now you have before you on this wall a list of those very cities. Do you see the tall figure to which the native in the white garment is pointing? That is the god Amon, the great god of this state temple. He wears two tall plumes on his head, carries a sword in his extended right hand, while with his left he grasps a number of cords which you see extending backward toward his body. You must think of those cords as extending across his body and beyond to the lines of captives whom you see behind him in long rows, beginning at about the level of the god's waist. Each captive is the symbol of a city; he has no legs, but is merely a head and a pair of pinioned arms attached to an oval containing the name of the city. These long rows of ovals, then, form a list of the cities of Palestine which Shishak captured on the campaign of which we have just read, and you may find among them many cities spelled out in hieroglyphs, which are also mentioned in different places in the Old Testament. The most interesting among them is the name "The Field of Abram," being the earliest known occurrence of the patriarch's name.

It is there just where the left shoulder of the native in the white garment cuts into the list. Amon is leading and presenting them all to the king, who, in having the relief this made, wishes to acknowledge his god as the source of his victory. The figure of the king should occupy that vacant space which you see on the extreme right. For some reason the sculptor was unable to finish his work, and the figure of the king was never inserted. But you can see the group of captives before the god, kneeling with uplifted hands beseeching mercy. The king should be represented as slaying these unfortunate prisoners in the presence of his god. Such representations are common in these Theban temples, so that we know just how this one should appear. You must imagine the outstretched hand of the king as occupying that vacant space just over the heads of the kneeling victims, and grasping them by the hair, as he brandishes a huge war mace or sword, with which he is about to dispatch them. The inscriptions above this group before the god contain the names and fulsome titles of King Shishak, while those immediately before the god's face and behind him over the list of cities contain the words of the god as he presents the cities to Shishak and promises him victory over his enemies.

We have read but a few pages in this great historical volume preserved on the walls of the temple of Karnak, and if we should attempt to read them all, it would require many volumes of the size of this one. But these examples will suffice to indicate the character, at least of some of them ; and we must now leave the east of the river and go back to the west shore, from the cliffs of which you will remember

[^67]we enjoyed our first view of Thebes (Position 47). First we shall go to the colossi of Memnon, which we saw from Position 47 . This next position is given on Map 9 , which you will see is a portion of Map 8 on a larger scale. Find the lines numbered 64 , which start near the middle of the lower margin and extend toward the north.

## Position 64. Colossal "Memmon" statues at Thebes -the frorther one used to utter a cry at surrise

Thebes was the goal of many an idle tourist in the days of Roman power, as she is now, and we have before us one of her chief attractions both then and now-the vocal statue of Memnon. We have now crossed the river and are looking nearly due north, with Luxor on our right, the western cliffs on our left, but sweeping out into view in our front and flanking the Ramesseum, the columns of which are just within our range in the distance, on the right (Maps 8 and 9 ). Here once stood a noble temple, erected by Amenophis III, and the two colossal statues before us adorned its front, as we have seen them before the pylons at Luxor and Karnak. Of that temple there have survived only a few blocks some hundreds of feet behind these statues. It was wrecked by Merneptah (or Merenptah), the son of Ramses II, in order to secure material for his own temple a quarter of a mile behind the colossi. The temple built with the materials secured in this contemptible manner has likewise perished. Among other things which Merneptah removed from this temple for his own building was the magnificent stela which you saw in the museum at Cairo, containing a record of

Amenophis III's buildings for the gods. You will remember that Merneptah turned its face to the wall and inscribed upon the back the record of his victory over the Libyans, in which he incidentally mentions Israel (Position 14). This, then, is the spot where that remarkable stela stood, before it was appropriated by Merneptah. These great statues, which have made this place famous since the Romans first occupied Egypt, are of red sandstone, a very hard conglomerate, often called gritstone, which is found in a hill on the northeast of Cairo, called by the Arabs "Gebel el-Ahmar," that is, "the red mountain." From this quarry these huge masses of stone were towed up the river to Thebes. With the pedestal they are now about 65 feet high, but they have lost their crowns, which would have made them nearly 70 feet high. Each statue proper is of one block, the base upon which it rests being a separate piece. You are objecting to this remark and calling attention to the blocks of which the upper part of the further statue is built. That is true, but that work was done by the Roman emperor Septimius Severus (193-211 A. D.), a restoration which was a misfortune for the Thebans, as we shall see. When Amenophis III set up these giants in the 14th century B. C., they were intended as portraits of himself, as all such colossi are royal portraits. Over three thousand years of storm and weather have passed over them, until the features have utterly vanished, and their artistic value is gone. Meanwhile, the soil of the plain around them has risen over six feet by gradual accumulation, which, with the loss of the crowns, much reduces the height of the statues. Then the earthquake in $27 \mathrm{~B} . \mathrm{C}$. overthrew the upper portion of the further colossus, and shortly

[^68]after that it was noticed that this statue emitted a cry every morning at sunrise, or shortly after. The Greek residents of Egypt immediately averred that the figure must be that of Memnon, the famous son of Eos, the dawn. He had fallen in the Trojan war, and now, said they, he here greets his mother with every returning morning. Visitors came in great numbers to hear the sound, and scores of foreigners have left records of the fact in inscriptions on the great statue. Men of the highest rank have thus left memorials of such a visit, including the emperor Hadrian, who traveled in Egypt in 130 A. D. In his reign no less than twenty-seven people left inscriptions here. With one exception these inscriptions are in Greek and Latin, and they run from the 11th year of Nero ( $54-68$ A. D.) to the restoration under Septimius Severus, when the noises ceased. There can be no doubt that the statue actually emitted a sound, as these numerous witnesses testify, and it has been proven that stone such as this conglomerate, when expanding rapidly, does give forth a ringing, metallic sound. As the increasing heat of the morning sun beat upon the statue it rapidly expanded, after having cooled all night, and in so doing the sounds which so many visitors heard were produced.

At high Nile the plain all around us is flooded, and you see that these peasants plow and cultivate their fields to the very bases of the colossi. They consider it a great misfortune that the statues are here, for as the winter advances and the crowds of modern tourists increase, a broad pathway is trampled through their fields all the way from the river to this spot, and they complain bitterly as they see their crops crushed under the feet of a host of visitors all around the statues.

See how impressively the western cliffs rise between the two giants. Those long rows of tomb doors mark the resting-places of the great Thebans, who lived in the days when these statues were set up; and among them is the tomb of the very architect who erected them. The sands of the desert that lie behind have drifted in athwart the face of the cliffs in vast masses like great drifts of snow, and scores of tombs are thus covered awaiting the excavator.

Now we shall wend our way across this plain to that mass of ruins in the distance to our extreme right, the Ramesseum. This position is given by the lines numbered 65 , which start in the lower center of Map 9 and extend north. This position is also given on a detailed plan of the Ramesseum (Pla11 13).

## Position 65. The Ramesseum, mortuary temple of Ramses II-northest toward the tombs in the cliffs, Theles

Here we look upon the remains of our first temple on the west side of Thebes. The Memmon colossi are now upon our left and a little behind us, Luxor is directly behind us, while before us rise the cliffs that flank the western plain of Thebes (Map 8). We are looking nearly down the axis of the temple, which, as you will see by reference to Plan 13, is almost in a northwest-southeast line; but we usually treat these temples on the west side of the river as if they faced exactly east, which makes reference to the compass much easier. We are therefore standing at the east end of the temple and looking toward its western end, that is, the rear of the building. What a sad ruin! For centuries it served as a quarry and was still so
used far down into the 19 th century; and this, following upon the ruin of earthquake and the havoc of war, has almost wrecked the noble temple. You find difficulty in tracing any plan at all, or any relation of the parts because it is so fragmentary and scattered. We are standing upon the southern tower of the first pylon (see Plan 13); the central aisle leading from front to rear is here on our right, and that vast colossus on the extreme right, with a native in a snowwhite garment mounted upon it, is lying obliquely across the aisle. Just behind it and extending out of range on the right, you may see the tower of the second pylon on the other side of the aisle; the other tower of the same pylon, on this side of the aisle, has been quarried away, and only the lower courses of the base remain, against which the figure of this lower native is outlined. If that tower were still standing it would cut off all our present view of the rear of the building. Again you can locate the central aisle by the base of the overturned colossus; for the colossus once stood upon that huge rectangular block near us, on our extreme right, with half a dozen rough fragments scattered over its top. Passing down the aisle toward the rear, one has that block on his left (see plan), and you see how the fallen giant bars all further progress in that direction. In the rear it is much easier to determine the aisle, for you find there a colonnaded hall, a hypostyle like that at Karnak, and under that higher section of roof in the middle we must of course locate the central aisle, between a double row of taller columns, crowned by flower capitals on either side, which is exactly what you observe there. You can discern also the shorter columns, with bud capitals on the right and left of the central

[^69]aisle, precisely as we found them at Karnak. Now I think you can easily trace the aisle from front to rear. Yonder hypostyle was preceded by two successive courts, which you can best place by examining the plan (No. 13). There was a colonnade at the left side of the "first court," and you see the bases of the columns belonging to it down at our feet on the left. If you attempt to follow the middle aisle, the entrance to the "second court" is, as we have seen, barred by the fallen colossus; but the destruction of the left tower of the second pylon enables us to gain a full view of this court. It was surrounded by a colonnaded portico, but in front and rear, next to the court, we find a row of Osiris pillars, each pillar having carved on its front a statue of Osiris, standing with crossed arms and holding the scourge and crookstaff as the symbols of his dominion. Four of the Osiris figures off there to our right serve to mark the rear of the court for us, and immediately to the right of the native on the colossus you note the shoulder of one of the Osiris columns, behind the second pylon, forming the front of the court. The corresponding figures on the left of the second court have been entirely destroyed. But you can see where they should be, if you will note upon Plan 13, the three low flights of steps which lead from the second court, through the portico to the hypostyle hall. Turning again to the temple, you will observe in the second court the lefthand flight, which should pass between the last two Osiris pillars on the left. The middle flight you must place just on the left of the group of four Osiris figures still standing on the right, while the right-hand flight passes between the further two of these, but is hidden from our view by the fallen colossus. When

[^70]we have viewed all this from the rear also, it will come out more clearly, and you can return here and pick out the parts again.

The purpose of this temple, like that now vanished building behind the Memnon colossi, was different from that of the temples which we have seen on the east side of the river. Do you remember that chapel in the east front of the mastaba? And again, the temple on the east side of each of the pyramids? Well, these temples on the west side at Thebes are for precisely the same purpose and occupy the same position with relation to the tombs of the dead. The Pharaohs of the Empire, as we shall see, no longer built pyramids, but hewed out vast tombs in a valley behind yonder cliffs, and here to the east of those cliff tombs, as once they were east of the pyramids, are the royal mortuary temples. But they have now developed from a chapel of rather modest dimensions, to a magnificent sanctuary comparable to the great state temple on the other side of the river. This now desolate and forsaken temple was maintained by splendid endowments established by the king for that purpose. Those low mounds which you see just beyond the temple, on the left of the hypostyle hall and on the right of the four Osiris columns, cover great storehouses in which the temple income in wine, oil, honey, grain, vegetables, textiles, gold, silver and costly stones was stored, and there you may pick up to this day, the seals from the wine, oil or honey jars, bearing the name of Ramses II, just as they were broken from the jars by the temple steward in the days when the Hebrews were sojourning in the land. All this was intended to ensure the Pharaoh just such food, drink and clothing after death as he had enjoyed while
king of Egypt. Thus he was here long worshiped as a god.

You have already noticed the roof of the central aisle, out yonder over the hypostyle. We shall now stand out there upon that roof and look this way toward our present position on the first pylon. But before we go, glance once more at the cliff behind the temple, for when we have finished our inspection of this building we shall go up yonder among those tombs and examine the interior of one of the best preserved, of which you see so many openings. As we are now looking somewhat west of north, with the Nile to our right and behind us, we shall next be looking southeast toward the river. Find the lines numbered 66, which start near the centre of Map 8, and extend southeast, and you will see that we are to be looking over the river to Luxor on the southeast bank. See Plan 13 also.

Position 66. From the roof of the Ramesseum past the fallen Colossus of Ramses II, southeast over the Plain of Thebes

Here, you see, we are practically reversing our position of a moment ago, when we stood on yonder pylon at the extreme right end and looked up here toward the hypostyle that is now beneath our feet (Plan 13). This is an admirable point for locating the temple with reference to the other shore, for as we look up the axis of the building we see that the white front of the hotel at Luxor, on the other side of the river, is almost in a line with it. The river flows, as you know, directly in front of that hotel, off to our left or the northeast, but we cannot see it from here,

[^71]as our point of view is not sufficiently elevated. Out of range on the left is Karnak, and behind us are, of course, the cliffs, which we have so often seen forming our western sky-line. Under our feet is that central aisle, which we saw from the first pylon, and this native here on the right is sitting on an extending architrave which supports the roof beneath us. He is swinging his feet over the lower roof, which covers the side aisles immediately behind us. The vacant space before us is the second court, with its Osiris columns in front and rear (see Plan 13) ; those in front now face us, and of the four in the rear, which we saw from the pylon, you can discern only the arm or elbow of one, projecting from behind the pillar down here on our left. The first court now becomes more clear, as we see the first pylon which forms its front. Through the door, half choked with fallen masonry, appears a peasant just riding past on a donkey, as he goes to superintend one of those numerous threshing floors scattered over the plain between us and the buildings of Luxor. This face of the pylon, though you cannot distinguish them from here, is occupied by enormous reliefs, depicting Ramses II at the famous battle of Kadesh, the same scene which we found also at Luxor. And there, with his giant head reposing directly in the middle aisle, is that colossal statue of the same king, the builder of this temple. In the year 1300 B. C. it towered grandly above the pylons, and might have been seen far across the plain, but it has long lain as you see it now, a prey to the neighboring peasants who have broken it up for mill-stones. You will recognize its parts, in so far as they have survived, if you note that the native is standing on the forehead. The rest of the face is obliterated,
but you can clearly see the band around the forehead in front of the native's feet. The projection on the right of the head is the heavy head-dress of linen, worn so commonly by the kings, and hanging down upon the right shoulder, which is still well preserved. You saw the same head-dress on the statue of Khafre in the Cairo Museum (Position 10). On the right arm just below the shoulder you discern the royal cartouche or oval containing the name of the king; but you are not able to follow the arm down to the elbow, as the whole figure, arms and all, is broken off just below the breast. But you can discern the elbow on the great mass of the trunk, beyond the huge fracture, and even trace the beginning of the forearm. The figure was seated like the Memnon colossi, with both hands on the knees, and as it here lies on its back the vast legs should rise to the front of the throne block, as its front would now be the upper side; but both legs and throne are now missing. It is $21 \frac{1}{2}$ feet across those gigantic shoulders, the arm above the elbow is 4 feet 9 inches thick, and judging from the dimensions, the figure must have been about $57 \frac{1}{2}$ feet high, which makes it the largest statue in Egypt, as we must deduct the bases from the height of the Memnon colossi.

We have seen (Position 60) the obelisks of Queen Makere, weighing some 350 tons, but here we have a figure cut from a single block, and weighing when finished over 800 tons. Yet that figure, being of Assuan granite, was brought down the Nile from the first cataract; and this same king accomplished a still more remarkable feat. For Petrie found in the ruins of the Delta city of Tanis the scanty fragments of a red granite colossus, almost certainly belonging to

[^72]Ramses II, which must have been about 92 feet high and weighed some 900 tons. The French expedition of Napoleon I found no less than eighteen of these colossi on this west side of the river alone, although, of course, they were not all as large as this of Ramses or those of Amenophis III, the Memnon colossi.

Let us now turn around more to the right and look from this fallen giant to its fellows out yonder on the plain. See the lines numbered 67, starting near the centre of Map 8. Comparison with the lines numbered 66 , starting from the same point, shows more definitely how much more toward the south we are about to look. This position is given also on Map 9.

## Position 6\%. Plain of Thebes and the Colossi of Memuon seen at the south from the roof of the Ramesseum, Thebes

We have stepped back a little from our former position, and turned toward the south (the right), and we are now looking directly southward toward the colossi of Amenophis III (Map 9). The trees which form that broken line against the faint background of the distant eastern cliffs mark the course of the river, whose shores they fringe. Hence Luxor is now out of range of vision on the left, while the western cliffs are on our right outside of our prospect. The level fields are dotted here and there with threshing floors, and in the grove of acacias before us is the favorite well of all the neighboring herdsmen. Yonder in the midst of the broad plain are the solitary colossi, looking out upon the Nile as they have done for nearly 3,500 years. At a considerable distance behind them, you notice a low, dark mass, just in line with a heap

[^73]of white straw from one of the threshing floors. That dark pile is all that remains of the temple that once stood behind the colossi, where now you see the level fields. There lies a huge slab with an inscription describing the temple and dedicating it to Amon, and marking, as it states, the place where the king stood in the performance of the temple ritual. The foundations of the building are undoubtedly still there under the accumulated. Nile deposits at least six feet deep; but they have never been excavated. There is no doubt but that excavations on this spot would bring many inscriptions and other important monuments to light. The territory between us and the colossi was excavated by Petrie, resulting in the discovery of the remains of the temples of Thutmosis IV, Queen Tewosret, and Merneptah, who destroyed the temple of Amenophis III behind the colossi for his building materials, as we have before noted. They stood out here on ground just out of range on our right, but they have now vanished, so that Petrie was able only to follow the ground plan.

Here at our feet, as we stand upon the higher roof of the central aisle of the Ramesseum, are the roofing blocks of the side aisles on the south side of the hypostyle. Our native servant has thrown himself down full length upon them, regardless of the broiling sun and the fact that the roof is heated through and through by the suns of countless tropical days, until it glows like a furnace, and the hand shrinks from touching it. With myriads of flies swarming into his eyes and ears he slumbers peacefully while we make our observations from the roof of the temple. Incidentally he makes a very good standard for measuring these roofing blocks; disregarding his out-

[^74]stretched arms, the block on which he lies is nearly four times his length, so that we may call it some 18 to 19 feet in length. If we return to Position 65 to look at this hall from the first pylon again, bear this fact in mind and it will much increase your appreciation of the size of the building as a whole. And as you do so look up again at the cliffs behind the temple, for among the tombs and in one of the tomb chambers up there we shall now make a short visit.

Our next position and field of vision are determined by the lines numbered 68 , which start near the centre of Map 9, and branch toward the lower left-hand corner or toward the south.

## Position 68. Looking south over the Theban Plain and the temples of Medinet Habu, from the cemetery of Abd el-Kurna

We have climbed the western cliffs and stand in the midst of the innumerable tomb openings which we saw from the Ramesseum below. This particular locality is known to the natives as Shekh Abd elKurna, and you will find it so called near the centre of Map 9. We look almost due south, but a little west of south, and just over the head of the native sitting on the spur of rock you see the mass of buildings making up the group of Medinet Habu, which we are to visit soon. We shall later return to this spot and examine the details of this beautiful landscape; now we shall merely locate ourselves and the tomb which we are to visit. Behind us is Der el-Bahri, which we have not yet visited, on our left Karnak and the river, flanking the plain over which we have come (Map 8). The southern extension of that plain is before us.

Here at our feet are a few of the tombs with which this cemetery is filled. You observe that the face of the cliff has been smoothed and so cut in as to produce a perpendicular wall, with a court in front. In the middle of the perpendicular wall is a door leading to the chapel chamber of the tomb, which is excavated in the solid rock. It was these doors which you saw in long rows from the Ramesseum pylon a little while ago. In front of the forecourt, Theban gentlemen of wealth were accustomed to lay out a garden in which the deceased was supposed to divert himself, lying about under the trees and enjoying himself as he had been accustomed to do in his garde: down in the city. There was not always room for such an addition, but in some cases it must have been of considerable size, for the architect who put up those obelisks of Thutmosis I tells us how many trees he had in his tomb garden, and all the various kinds; and they were so numerous that they must have formed a fine grove. Here all around us, then, sleep the great of ancient Thebes; or we should more fittingly say slept, for these tombs have all, with rare exceptions, been robbed in antiquity.

The particular tomb which we shall next visit is yonder over this spur of rock on which these natives are perched; its entrance at present, owing to the débris gathered about it, is a mere hole in the ground, like that one which you see over the head of the standing Egyptian. Our tomb opening is very close to that one, but is not quite in range from our present standpoint. We shall presently stand in the tomb chapel which has so long served as the abode of an Egyptian officer, who lived in the 16 th century B. C.
Position 68. Maps 3, 9.

## Position 69. Painted tomb chamber of Prince Sennofer, hewn in the rock of the western cliff's, Thebes

Could you not believe that these colors were laid on yesterday? Yet it is 3,500 years since the artist who painted this chamber stood where you and I stand now and looked over his work for the last time before turning it over to its owner. We are stationed at one side of a nearly square chamber, the ceiling of which is supported by four massive pillars, two of which are just out of range on the right. The whole is hewn out of the western cliffs, like the tombs which we saw at Benihasan and Assiut. Its purpose and function are the same as we have found before in the mastaba chapels, the pyramid chapels, and the rock-hewn chambers at Assiut or Benihasan. This is the room where the deceased lives and receives food and drink from his surviving relatives and descendants. Hence the character of these paintings. The owner is everywhere depicted, receiving, from a lady standing before him, such offerings as the Egyptian delighted in. Let us see if we can ascertain who the couple are. On the first pillar at our left you see the noble owner, seated in a wooden chair, the legs of which represent those of a lion. He is receiving from the lady a necklace which she presents upon a little tray or shallow dish. Now the ancient artist has not left us in doubt regarding the person for whom this gift is intended. He did not do this for our benefit, for his mind was as far from thinking about us as we are from any thought of the distant people who may some day excavate our capital at Washington, and speculate upon the probable height of the fallen Washington monument. He put that inscription over the man's figure, in order that

[^75]this scene might be for the benefit of this man alone. The magical charms pronounced over this painting, as well as all the others, have lent it a subtle virtue, by force of which, in the belief of the Egyptian, the deceased was continually, daily and repeatedly, actually receiving the gift here depicted. If his name were not there the virtue and value of the scene might not be enjoyed by him alone. Hence we are able to read his name and titles over every one of these paintings, and over his figure on this first pillar we read: "The hereditary prince, enduring in favor, great in love, favorite of the excellent heart of the king, prince in the Southern City (Thebes), overseer of the garden of Amon, Sen-nofer, deceased." The lady before him is likewise designated in the inscription above her figure: "His beloved sister, the musician of Amon, Meryt, deceased." This lady, called his sister, was also his wife, as the Egyptians commonly married their sisters. On the other pillar, where Sen-nofer sits upon a camp-stool under the two sacred eyes, she is presenting him with a bolt of fine linen and a lotus flower, which she holds to his nose for his enjoyment. On the right side of the same pillar the two are conversing together, and on the side wall which you see between the two pillars they appear again in an arbor, praying to Osiris and Anubis, who are concealed by the intervening pillar on the left. Finally on the wall at the right of the further pillar you observe a priest with a panther skin hanging from his shoulders, pouring out a libation of water from a jar in his right hand, while he extends a censer of burning incense with his left. Thus our friend Sen-nofer, who had charge of the gardens of the state temple, which we have seen at Karnak, nearly 1,600 years before Christ,

[^76]in the days of King Amenophis I, was supplied with all possible necessities for his long sojourn in that uncertain country, toward which the Egyptian looked with such dread. Similar scenes depicting all the various activities of life, from the grand vizier receiving the envoys of Syria, to the artisan at work upon the king's buildings, restore to us the life of Egypt and to some extent of Syria, centuries before the Hebrew exodus. Thus while the cities of the living have perished, the life that surged through their streets and houses and bazaars has been preserved to us in the city of the dead, in this vast Theban cemetery, where the tombs are so numerous that the face of the cliff has been not inaptly compared with a huge sponge. Could we now push up a few feet through this ceiling, we should emerge upon a similar tomb chamber above; if we should pierce a shaft through the floor, we should presently fall through into a chamber below, and we should have the same experience if we should penetrate through either side wall. All around us as we stand in this silent dwelling of the dead are the houses of other dead. The Egyptians themselves had great difficulty in this respect, for they were often unable to put down the necessary vertical shaft, at the lower end of which they desired to excavate the sepulcher chamber for the mummy; hence it was frequently necessary to push a horizontal passage further into the cliff, to a point where it would be safe to descend without penetrating a chamber below.

There are many larger chambers of finer workmanship than this in the Theban cemetery around us, but there is none so fresh and well preserved, and hence we have visited this one. When we remember that

Position 69. Maps 3, 9.
these are all simple water-colors, with which the artist worked, and that all oil colors were unknown in ancient Egypt, we shall appreciate the marvelous possibilities for the preservation of the works of men inherent in the climate and other conditions of the Nile valley. Such conditions are found nowhere else, and hence we can nowhere else study early man as we can here.

You will find our next position marked near the centre of Map 9 by the lines numbered 70. There we are to look north over the ruins of the temple Der el-Bahri. See also Plan 14, an enlarged plan of the temple, where lines marked 70 cut out the portion of the temple that we are to see.

> Position \%0. Buried for ages-colonnaded terraces of Queen Makere's magnificent temple, Der elBahri, Thebes (looking north)

What temple in all the world is so superbly situated as this beautiful sanctuary of the great queen? The snow-white colonnades are flanked by the naked, desolate cliffs with their fine play of light and shadow, bringing out rich masses of brown and yellow against which the clear lines of the temple are sharply defined, producing an effect of the whole, not to be found in any other temple of Egypt or of any land. For no such terraced structure as this is known anywhere else, and you are struck from the first with its peculiar arrangement, unlike any temple that we have visited. It is an imitation, on a much larger scale, of a terraced temple recently unearthed here on our left just beside the larger temple. This prototype was

[^77]erected by one of the Mentuhoteps of the 11 th Dynasty. The temple faces southeast, and we are looking obliquely across the main central axis, nearly due north (Map 9 and Plan 14). On our right are Karnak and the river, behind us are the Ramesseum and the colossi in the plain, on our left the western cliffs and the desert behind them. You have already seen that Queen Makere was a great builder, for you remember her giant obelisk, which we found at Karnak. But we have before us a still greater work of hers. The Holy of Holies, in this remarkable temple, is hewn in the rock of the cliff, and you can see its entrance at the foot of the cliff on the upper terrace. It is that dark rectangular doorway directly in a line over the head of this nearer native; not the one farthest to the left and lower down, which is the entrance to the side chapel (Plan 14). In the axis of the temple before that door to the Holy of Holies you see a detached stone doorway, out toward the edge of the "upper court." That is marked as the "Granite Door" on the plan (14). This will locate for you the upper court. The "middle court" is directly before us with a colonnade both above and below it. Communication between the upper and the "middle court" is maintained by an "ascent" or causeway. A similar causeway which you notice at the extreme right connects the middle and a "lower court," of which you can see only one corner just behind this house on the right. That is the house of the excavators, who freed this temple from the accumulated débris and rubbish of many centuries, which completely covered it. The work was done by the Egypt Exploration Fund, under the direction of M. Naville, of Geneva, and when they began, if you had viewed the temple from this place you could
have distinguished little more than heaps of rubbish and detritus from the cliffs above Up yonder in the upper court rose the tower of a Coptic convent, built with brick from neighboring late tombs. It was this building which gave to the temple its modern name "Der el-Bahri," which means Northern Church or Convent; but it was removed in clearing the temple by M. Naville.

The builder, Queen Makere herself, called her temple "The Most Splendid," and it fully deserved the name. Out here on the right, but now totally destroyed, so that we miss nothing by their being out of range, were a pair of pylon towers, to which an avenue of sphinxes led up from the river. As there is no soil here, the trees and plants, that used to beautify the terraces, were planted in holes excavated in the stone and filled with Nile mud. The rock forming the middle court before us was not of exactly the proper shape for it and it had therefore to be built out on this side with limestone masonry, adorned with large panels. The sculptures in this temple are among the finest in Egypt, and their subject matter is of the greatest interest. The wall behind the colonnade on the other side of the ascent is covered with scenes depicting the divine birth of the queen, while that on this side of the same causeway is devoted to a most interesting series of reliefs showing the queen's expedition to the lands on the Somali coast of Africa, at the southern end of the Red Sea. We shall later look at one of these scenes in the last series. In the further corner of the upper court is another small court with a large altar of sacrifice in a fine state of preservation, and of the greatest interest, because such altars have all perished

[^78]in the temples of Egypt, though one other has since been discovered.

Throughout this magnificent temple the name and figure of the queen have been carefully erased, especially by her great brother, who was also her husband and successor, Thutmosis III, but also by her other brother, Thutmosis II. Thus its walls have beoome for us the evidence of political factions like that which we found on the wall at Karnak. As we enjoy the peaceful beauty of this lovely temple, we would never have imagined the family feuds, the feverish hate, the plots and counterplots among which its walls rose, until at last when the enemies of the queen were successful, she was thrust aside by her great brother, Thutmosis III, and the temple was left unfinished.

After we have inspected one of her reliefs, we shall climb up the narrow path that leads to the top of those cliffs and from there look down along the line of cliffs at present on our right. The lines marked 71 on our Plan 14 show in what part of the temple we shall find the relief we are now to study.

Position 71. Queen Makere's expedition to East Africa in the sixteenth century before Christ -reliefs at Der el-Bahri, Thebes

We are now at the left end of the colonnade on the left side of the "ascent" leading from the middle to the upper court, and we are looking at the end wall (Plan 14). What a pity that it is so damaged! Time and space do not permit us to follow every step of this expedition; the five vessels composing it have reached their destination, having sailed from some unknown port near the north end of the Red Sea, and having

[^79]now anchored in some harbor along that strip of coast at the south end of the Red Sea, known as the Somali coast (Map 2). The Egyptians called this country the "land of Punt," and they had traded with it in expeditions by sea as far back as 2600 or 2700 B. C., being the earliest sea voyages known in history. Solomon traded along the same route, but that was six hundred years later than this expedition of Queen Makere in the 16 th century B. C. The expedition has now landed and the wall before us shows the first intercourse with the natives of the land of Punt. The scenes are arranged in rows one above another, and we shall begin with the lowermost. Under this lowest row is a band of wavy lines representing the sea. You notice the fish in the waters. Those fish are so accurately done by the "staff artist" who accompanied the expedition that they have been identified with fish still surviving in the Red Sea. On the right is a file of soldiers with large shields, preceded by their commander leaning upon his staff. At the extreme left where the wall is broken off, you see the prince of the land of Punt, standing with uplifted hands in salutation of the Egyptians. Before the Egyptian officer is a low table loaded with necklaces and strings of beads, brought, of course, for purposes of traffic. Let us now read the inscriptions which the ancient artist has considerately inserted as an explanation of the scene. Over the table and the Egyptians are the words: "(The arrival) of the king's messenger in the Divine Land (Punt), together with the army which is behind him, before the chiefs of Punt. They have been dispatched with every good thing from the court (of Egypt)." Over the prince of Punt we find: "The coming of the chiefs of Punt, doing obeisance, with bowed head, to receive

[^80]the army of the king." You see the queen regularly refers to herself as the "king." The name of the Puntite prince is also written before his figure under his uplifted arms, thus: "Parohu." In the next higher row over the line of soldiers with large shields, you see a large rectangular space with a curved top. That is the Egyptian officer's tent, in front of which he now stands, while the natives of Punt bring before him the products of their country. The figures of these men have now disappeared, but the products which they have brought are piled up before the Egyptian commander. You see a round-topped heap of myrrh and other fragrant gums, and just where the surface of the wall is broken away two flat baskets filled with gold in commercial rings. Just in front of the Egyptian officer is a short inscription with these words: "Reception of the tribute of the chief of Punt, by the king's messenger." The tent of the officer also contains an inscription of great interest; it states: "The tent of the king's messenger and his army is pitched in the myrrh-terraces of Punt on the side of the sea, in order to receive the chiefs of this country. There is offered to them bread, beer, wine, meat, fruit and everything found in Egypt, according to the command of the (Egyptian) court." In the top row, which is much destroyed, we see that the queen was not content to bring only the myrrh of Punt to Egypt; she must have also the trees themselves which produce the aromatic gum; so that you see up there a tree slung in a basket, suspended from a pole, and carried on the shoulders of four men to the neighboring ships. Large numbers of these trees are thus carried on board, and together with the myrrh itself, monkeys, dogs, apes, gold, ivory, ebony, panther skins, all sorts
of aromatic woods, fragrant gums, and even natives of Punt and their children, are loaded into the waiting ships and sail away for Egypt. Those trees were intended for this very temple in which we stand, and here they were planted. For, as the queen elsewhere explains, she desired to make a "Punt in Egypt." Now, as we know from many inscriptions, and as you have already noticed in one of these before us, the myrrh trees grew on the terraced slopes of the hills above the sea in Punt, which the Egyptians called "Myrrh-terraces," and the resemblance of these terraces to her terraced temple may have occurred to the queen, as she attempted to reconstruct a "Punt in Egypt." We might follow the expedition on these walls until it reached Egypt, and we might watch the queen presenting the wealth of this distant land to this splendid temple, we might see her officials weighing up the gold, measuring the myrrh and counting the ivory tusks, as they receive them all in the temple treasury; but there are many other marvels that await us here in Thebes, and we must pass all this and ascend the cliffs which flank this temple.

This next standpoint is given on both Maps 8 and 9. Note particularly the red lines numbered 72 , which start in the upper middle portion of Map 8 and branch southeast across the river.

Position \%2. From the high cliffs above Der elBahri, southeast across the plain to Luxor and the Nile, Thebes

We have looked across this plain before, but that was from a point further south (the right), where we had in range the colossi in the plain and the Ramesseum

[^81](Position 47). They are now out of our field of vision on the right. We are looking southeastward, our line of sight being at right angles with the river, which you descry as a white streak, behind which, on the right, is Luxor plainly marked by the white front of the hotel (Map 8). On both sides of the river the fields stretch away far and wide, but our range of vision does not include Karnak, which is, of course, some distance to the left (north) of Luxor. Below us, hidden by the rocks at our feet, is the terraced temple of Der el-Bahri at the foot of the cliffs, and if our native attendant here should step incautiously out over these jagged points of rock, he would be dashed to instant death on the pavement of the upper court several hundred feet below us. Out beyond the lower court where the pylons once stood, we see the sands of the desert covering many an ancient tomb. That rectangular brick building is a tomb of the 26 th Dynasty, and the whole group of burials out there is known among the natives as El-Assasif. Beyond it you see the sands merging into the vegetation of the plain, but the line of transition is still very clearly marked.

All along this desert margin, formerly stretched in an imposing array that line of noble temples, of which now there are standing only the temple of Kurna, on the north (our left), the Ramesseum, now just outside our field on the right, and Medinet Habu on the extreme south. If you will look at the Map (No. 9), you will find the ground plans of those that have been located, but of which the superstructure has now disappeared. The temple of the great conqueror, Thutmosis III, stood out yonder on the plain, beyond and to the right of the large brick tomb, where now you see
nothing but the level fields of the peasant. There Thutmosis III celebrated one of his magnificent feasts of victory on his return from his first victorious campaign ; but like all the others in that splendid line, it has utterly vanished. No city of the orient ever possessed such a group of buildings as these, and seen from below against the fine mass of these gaunt cliffs upon which we now stand, they must have made a spectacle such as the modern world has never looked upon. Having as their pendants on the east shore the mighty mass of the Karnak group and the fine colonnades of Luxor, the whole set in the deep green of temple gardens, surrounded by splendid palaces and gorgeous chateaus of the nobles, about which were grouped the immense quarters of the vast city with miles of busy streets, markets and bazaars, the whole formed such a prospect from these heights as we have perhaps painted in fancy as we read the Arabian Nights, but no modern eye shall ever see.

For centuries the inhabitants of the city buried their dead in these cliffs at our feet, so that there grew up on this side of the river the quarters of the undertakers and embalmers, who here practiced their grewsome craft by thousands. Had we stood here on any day whatever, before the disappearance of the great city, we might have seen the sombre line of Nile boats leaving the other shore and pushing across the river. Landing on this side we should have traced the long procession slowly winding on foot across the plain below us, while as they approached the sounds of mourning and lamentation, at first almost inaudible, would gradually rise until they seemed to fill all the plain, as the mourning cortege grew near one of those innumerable doors, which we have seen in the face

Position 72. Maps 3, 8, 9.
of the cliff. All day long we might have seen such processions, longer or shorter, as beseemed the rank and wealth of the departed, leaving the city yonder and entering these dread chambers beneath us; and every day for many centuries this continued, until these cliffs for miles above and below us here are honeycombed with such chambers as that of Sen-nofer, which we visited. And the vanished city, which once filled the broad plain yonder, tells its story to-day only in the paintings, inscriptions, and mortuary furniture still preserved in this city of the dead.

These tombs in the face of the cliffs are only those of the Thebans, not those of their kings. The tombs of the kings are now behind us, in a secluded valley, into which we shall presently look. There is, however, a fine view down the river from this point, and after we have enjoyed it, we shall look down into the valley where the kings were buried. First, then, we turn to the left, with our line of sight at right angles to that along which we are now looking.

See the red lines numbered 73 , starting from the upper midclle portion of Map 8 and extending northeast. The more extended range of vision which we are about to enjoy is marked out more fully on our large map of Egypt (Map 3).

## Position 73. Down the Nile (northeast) across the western cliffs of Thebes

Here is the rugged crest of the rocks which flank the temple of Der el-Bahri, as we saw them from below when we visited the temple (Position 70). We have now turned to the left from our former direction, and whereas we then looked directly across the

[^82]river, we are now looking down the river (Maps 8 and 3 ). On our right, but out of our field of vision is Karnak, on the left the desert, and behind us the upper river. Far down the valley, making a wide sweep westward, and in the distance turning again eastward till it is lost on the horizon, is the river, which cut out this remarkable valley and made of it a habitable land. You can see this curve better on the large Map 3. So it winds on past Cairo, nearly five hundred miles to the sea. Here sailed forth the fleets of the Theban princes against those of Assiut, back in the days when the supremacy of the north or the south depended upon the long civil conflict, till by the 22nd century B. C. Thebes won, and established the 11th Dynasty in the south to succeed the 10th in the north.

Who would have supposed that this comparatively narrow strean should be the sole source of fertility in this valley? As we see the river here it is but 2,000 feet wide, and at its widest it is but 3,300 , while at its narrowest point, at Silsileh, it is but a little over 1,100 feet. These cliffs before us, and all that we have thus far seen, are of limestone, but as we proceed up the river and pass Edfu, which is sixty-eight miles from the first cataract, we shall find them changing to sandstone, which continues throughout Nubia. With such excellent building material awaiting him on both sides of his narrow valley, it was, of course, a foregone conclusion that the Egyptian must become a master of masonry, and thus it is, that we find the earliest known stone masonry in this valley, while in Babylonia, where there is no stone to be had, the people only learned brick masonry, and the art of cutting and laying stone was almost unknown. Thus this river, with its requirements for irrigation devices of many kinds, and
Position 73. Maps 3, 8.
the cliffs, with their unrivaled building materials, made Egypt the mother of the mechanical arts, from which the later civilization of the Mediterranean basin largely profited, and bequeathed them to us of this modern world. As the Nile is the real maker of these cliffs, we see what a benefactor to all mankind this ancient river is and has been.

But now we must turn about to the left, with our right side toward our present outlook and our backs to Karnak, and we shall see where the kings were laid. This next outlook is given in the upper middle portion of Map 9. That particular section to be looked over is also given on a larger scale in the upper lefthand corner of Map 9 .

## Position 74. The Valley of the Kings' Tombs at Thebes, where the great conquerors of Egypt were buried

Is not this a fit burial place for the great kings of Egypt? What splendid desolation, what a noble valley of death encompassed, by these silent mountains, without a hint of life in all its circuit, save these chattering natives who prattle on like the children that they are, untouched by the wild impressiveness of the place. We are now standing with Karnak and the river behind us (Map 8) ; its lower course, which we have just seen, is now on our right, and out yonder behind that battlemented mountain are the trackless wastes of the Sahara. The valley at our feet is a depression behind the western cliffs, which we have seen so often from the plain of Thebes behind us. When the kings found that the pyramids no longer sufficed to protect the body of the royal occupant, they began

[^83]to follow the example of their nobles and hew out tombs in the rock of the cliffs. The place they chose was this valley, and you can see the doors that form the entrances to their tombs. The custom began, when the kings of the Empire took up their residence at Thebes, and the city entered upon its imperial career. The earliest king whose tomb has been found here is Thutmosis I. You remember his obelisks at Karnak. The same architect who erected those obelisks, Ineni, also made the king's tomb in this valley. He tells us with great pride how it was done: "I superintended the excavation of the cliff-tomb of his majesty, alone, no one seeing, no one hearing." This, of course, refers to the great secrecy with which it was done with the purpose of keeping the location from becoming known, and thus making robbery impossible. From the time of Thutmosis I, early in the 18th Dynasty, after 1550 B. C., to the priest kings of the 21 st Dynasty, or about $1000 \mathrm{~B} . \mathrm{C}$., this valley continued to be the royal cemetery of Egypt. During these 550 years, not less than forty-two tombs were excavated here, at least that is the number now known. But new ones are being discovered every season or two, and there are probably many more yet to be found, as the detritus from the cliffs above slides down and completely covers the openings.

The last tomb discovered was found by an American, Mr. Theodore M. Davis. It was that of the family of Amenophis III. Mr. Davis also penetrated to the tomb of the great Queen Makere, as well as to that of Thutmosis IV. Among all these tombs, only one has preserved the body of the king in its sarcophagus. In the winter of $1898, \mathrm{M}$. Loret discovered the tomb of Amenophis II, the son of the conqueror Thutmosis

III, with the mummy lying in its wooden coffin, which again was enclosed in a large stone sarcophagus, such as is regularly used in these royal tombs. Although the tomb had been robbed, the funeral garlands still lay upon the breast of the mummy. By order of the government the body was left lying in the tomb, undisturbed in its sarcophagus. The modern descendants of the tomb robbers of ancient Thebes, then forced their way into the tomb and rifled the body of their ancient ruler, but for nothing.

Do you see that open door facing us from our present point of view? That is tomb No. 9 on the map (No. 9), and belonged to Ramses VI.* Just to the left of that door you notice a pathway leading obliquely up to the face of the opposite cliff. There, in a small bay, which you can see from here if you look at the top of the cliff above the termination of the path, is the tomb of Amenophis II; there his body still lies, garlanded in its ancient funeral wreaths, just as they were put there on the day of burial, over 3,300 years ago. The government has put in electric lights, and the hosts of Cook who visit Thebes every winter, may enjoy the strange and incongruous sight of a Pharaoh lying in state in his tomb, under the glare of a modern electric light.

Those three on the left of the path, this side of No. 9 , belong (beginning with the furthermost) to Ramses I, the first king of the 19th Dynasty; to his son, Sethos I ; and to Ramses XI, of the end of the 20th Dynasty, the predecessor of Ramses XII, the last of the long line of Ramessids. There are thus some 350 years

[^84]Position 74. Maps 3, 8, 9.
between the farthest and the nearest of those three tombs. We will now take one of these native watchmen with us and enter the tomb of Sethos I, the middle one of the three just mentioned. We shall find the watchman necessary, for these tombs are now all closed with grated iron doors to keep out marauders, and he must unlock the tomb for us before we can enter. The tomb is No. 17 on the small sectional map in the upper left-hand corner of Map 9.

## Position 75. Descending gallery in the tomb of Sethos I, Valley of the Kings' Tombs, Thebes

How different from the tomb chambers which we have seen before! Yes, but this gallery is not a tomb chapel, nor are any of the halls to which it leads. The rock tombs, which we have thus far seen, are all chapels, where the dead lived and received his food, drink and clothing. King Sethos I's chapel is not here, but we shall see it later, on the western plain, where we found the Ramesseum and the colossi marking the chapel of Amenophis III. All those temples out there on the western plain were the mortuary chapels of the kings; this excavation in the mountain is only the sepulchral chamber for the mummy, and the long corridor leading in from the face of the cliff to that chamber. But this place of deposit for the mummy has developed far beyond the simple descending passage which served the purpose in the pyramid. It has now become a long gallery descending into the mountain through hall after hall, until that one is reached in which the mummy was laid. This gallery before us goes down through the successive halls 330 feet into the mountain. At the end, in the last chamber, was

[^85]a vast stone sarcophagus, in which the king was interred. The sarcophagus in this tomb, a magnificent work cut from one block of alabaster, is now in Sir John Soane's museum in London; and the body of King Sethos I, which was here interred in it, you have already seen in the Cairo Museum (Position 12). All about us on the door-posts and lintels is the name of Sethos I, and the walls are covered with inscriptions describing the career of the dead in the hereafter, and furnishing him with the magical formularies which shall deliver him from the hideous and grotesque monsters that beset his. path as he leaves this world. Many of these monsters are depicted by the artists on the walls of the galleries and chambers. To enable the tourists to see these things without the use of smoky torches, which damage the colors, the government has put in electric lights, and you can see the wire leading along the ceiling of this gallery.

Here, we stand immediately within the entrance, which is just behind us. It is like the entrance to tomb No. 9, which we saw from the top of the cliff. A flight of steps behind us leads down to the descending gallery in which we are, and another similar flight at the lower end where that native sits, conducts to a second descending gallery exactly like this one, below which, after a small ante-chamber, the first hall is found. There were elaborate devices for concealing the entrance and for misleading the tomb robbers when they had once discovered the entrance. Nevertheless, these tombs have all been rifled in remote antiquity, and already at the end of the 18th Dynasty, about 1350 B . C., it was found difficult to protect them. By the time of the last Ramessids, at the close of the 20th Dynasty (about 1100 B. C.), the robberies were
common, and we have the court records of the prosecution of certain tomb robbers under Ramses IX, now preserved in the British Museum. Finally the priestkings of the 21st Dynasty, unable to protect the bodies of their great ancestors, were forced to bring them together in a place of concealment, where they lay until modern times.

Let us now return to one of our former standpoints at the Ramesseum, from which we can see the place where the royal mummies were hidden.

## Return to Position 6.J. The Ramesseum, mortuary Temple of Ramses II-northwest toward tombs in the cliffs, Thebes

Here we are again, on the top of the first pylon at the Ramesseum (Map 9). Yonder behind those cliffs is the valley which we have just visited, the cemetery of the Theban Pharaohs, and this temple, as we have now several times noted, is but a chapel belonging to one of the tombs in that cemetery. When the priest-kings of the 21st Dynasty could no longer protect the royal mummies they found a secret shaft in the face of the cliffs before us, just beside the temple of Der el-Bahri. That temple is now hidden by that promontory of cliff on the right. If you will look at the base of the cliffs on the right, just in a line with that native in the white garment standing on the giant colossus, you will see some low brick buildings, and behind them a bay in the cliffs. High up in that bay on the right, at the upper edge of the sands, drifted in at the base, the priest-kings made or found their secret shaft. It was only about 40 feet deep, but at its lower end there was a passage extending some distance into

[^86]the mountain horizontally, and at its termination a large chamber. In this chamber, doubtless on some dark night, the mummies of Egypt's greatest kings were assembled, and before any one had discovered the shaft, it was filled up with stones and sand, and the top was covered with sand like the rest of the slope which you see there. For over 3,000 years the Pharaohs slept undisturbed in their hiding-place. Then in the early seventies of the last century, the mortuary furniture of several royal tombs was found in the hands of various dealers in antiquities, and it was known that the Theban natives must have discovered the material in this cemetery. For years these things mysteriously appeared and were offered for sale in various places. Finally, through fear, and hope of reward, one of the brothers who had been plundering the ancient hiding-place of the royal mummies betrayed its location to the Mudir of Keneh. Emil Brugsch Bey was the first European to see the bodies, and he thus describes his experience on first entering the long-hidden chamber up there in the mountain: "Every inch of the subterranean passage was covered with coffins and antiquities of all kinds. My astonishment was so overpowering that I scarcely knew whether I was awake or whether it was only a mocking dream. Resting on a coffin, in order to recover from my intense excitement, I mechanically cast my eyes over the coffin-lid, and distinctly saw the name of King Sethos I, the father of Ramses II, both belonging to the 19th Dynasty. A few steps further on, in a simple wooden coffin, with his hands crossed on his breast, lay Ramses II. . . . . The farther I advanced, the greater was the wealth displayed, here Amenophis I,
there Amosis, the three Thutmosis's, Queen Ahmesnofertari, Queen Aahhotep, all the mummies well preserved; in all thirty-six coffins, belonging to kings and their wives or to princes and princesses.

This was on the 5th of July, 1881. Six days later they had been loaded on board the government steamer, placed at the disposal of the museum authorities, and the great Pharaohs who had been wont to sail the Nile in the gorgeous state barge, now journeyed down the river in a modern steamboat. For forty miles below Thebes, on both sides of the river, the women gathered on the banks with loosened hair, following it with cries and shrieks of lamentation, as at a native funeral, just as their peasant ancestors must have done when these great kings were borne to their last rest, across this plain where we now stand, 3,500 years ago. For five years they lay at the palace in Bulak (a suburb of Cairo) used at that time as a museum building, and on June 1st, 1886, at the desire of the Khedive, they were unrolled.

Then were brought to light those venerable forms which had once sat upon the throne of ${ }^{\text {'Egypt, and the }}$ conquerors of Asia and of Nubia stood before us in the flesh, as you have seen one of them in the new Cairo Museum. Thus Egypt preserves for us not merely the magnificent buildings of the conquerors, the sculptured stories of their great deeds, their household furniture and their portraits in stone, but even the actual faces and forms, which once the great spirit of the Pharaoh had animated.

Out here on the right, much further east, another such hiding-place was discovered in February, 1891, which contained no less than 163 mummies of priests and officials of high' rank under the 19th, 20th and

[^87]21st Dynasties, whose tombs, which we see up yonder in the cliff, had been rifled. To save the bodies and their mortuary furniture from destruction, their descendants had thus gathered them together and concealed them like those of the kings. If you will look on Map 9 , just south of the Der el-Bahri temple, you may find the spot where the secret shaft for the kings' bodies was sunk. It is marked "Kings' Shaft"; but that of the priests and nobles is not indicated.

We go now to the mortuary temple of Sethos $I$. Our position is given in the lower right-hand corner of Map 9 by the lines numbered 76 .

## Position \%6. Looking north to the morturery temple of Sethos I at Thebes

We have already visited the tomb of Sethos I in the great valley of royal tombs, and we are now looking at the remains of the chapel of that tomb. We face almost due north, with the river on our right and the cliffs on our left (Map 9). Behind us is the western plain of Thebes, for this is the northernmost of the mortuary temples, and our next visit will be to the southernmost of these temples, the one at Medinet Habu. As Sethos I's father, Ramses I, whose tomb door we saw beside that of his son in the valley, had evidently died without having been able to construct such a temple for himself, Sethos I shared his own temple with his father, as we shall see. But Sethos I died before he finished it, and his son, Ramses II, the builder of the Ramesseum, completed the work and appropriated a part of this building for himself. Thus it is really a composite chapel for the kings of three generations.

This colonnade before us formed the rear of the second court. The two pylons in front of the two courts have utterly perished. Thus we have preserved to-day only the rear of the temple from the back of the second court on. The colonnade is built of clustered papyrus bud columns, of which there were originally ten, but only eight, you see, have survived. In the wall behind these columns are three doors; you can see the one in the middle, and the one at this end, but the door at the other end is concealed by the columns. This first door leads to the chapel of the grandfather, Ramses I; the middle door to the main sanctuary, that of the father, Sethos I; while the furthest door, which we cannot see, leads to the hall of the grandson, Ramses II, who completed the building. The main sanctuary is also sacred to Amon, as all these mortuary chapels were dedicated both to the dead king and to Amon, the state god. This temple marks for us the beginning of the 19 th Dynasty, in the middle of the 14 th century B. C. At the other or southern end of the line of western temples, we shall find that of Medinet Habu, which belongs at the beginning of the 20th Dynasty, early in the 12 th century B. C. Thus we have at the two ends of the temple line, the two buildings which mark the beginning and end of the nearly two hundred years, lying between the 14 th and the early 12 th centuries B. C.; while the temples of the preceding two hundred and thirty years, that is, of the 18th Dynasty, are grouped in the middle of the line.

We shall return now to our former position, 68. See Map 9.

## Return to Position 68. Looking south over the Theban plain and the temples of Medinet Habu from the cemetery of Abd el-Kurna

We have looked out over this splendid prospect before, when we climbed up here to visit the tomb of Sen-nofer. As you will remember, we are facing almost due south (a little west), on our left are Karnak, the river and the western plain, of which we have the southern extension before us (Maps 8 and 9). Behind us are Der el-Bahri, and that long reach of the river on its northward journey, which we saw from the heights over the terraced temple (Position 73). In the distance on the left we see the eastern cliffs dropping to the river, which is not visible, though it flows along at the foot of the heights, there where the point descends to the plain. Those heights are about fifteen miles away, and they bound on the south the Theban plain on the other side of the river. The stretch of fields between those distant cliffs and these on which we now stand is one of the most fertile districts in Egypt, as it is certainly one of the most beautiful.

The little white house directly before us, with five windows in the front, and flanked by a group of trees, is the home of Mr. Newberry, who has carried on excavations in the Theban cemetery for years, and occupies this kouse every winter. In the summer, when the excessive heat does not permit the continuance of such work, it is unoccupied and left in charge of a servant. The excavating archæologist, however, does not always have as comfortable quarters as we see here, or as we found at Der el-Bahri ; he must frequently live in a tent, or in a hastily constructed hut of sun-dried brick, material which can be found on almost any ancient site ; or what is best of all, he moves into one
of these tomb chapels here, which form a high, dry, clean and comfortable lodging if properly furnished. Some of the tombs here are known by the names of the great Egyptologists who have lived in them while working at Thebes. In so doing, the Egyptologist simply follows the example of the natives, who occupy these tomb chambers in large numbers, and many a fine inscription or important painting has been destroyed because a native has lived in the chamber himself with his family, or kept his buffalo cow and his chickens there. Thus the chamber where some high-born Egyptian gentlemen had expected to lodge for all eternity is now the shelter of his degenerate descendants, or has even become their cattle shed. This is, of course, no longer allowed in a chamber where any inscriptions of value can still be recovered.

Over the shoulder of the next hill you see the massive towers of Medinet Habu. The main building there is the latest in this line of western temples, as it is also the southern end of the line. You will remember that we have just visited the north end at Kurna. This temple before us was built by Ramses III, at the beginning of the 20th Dynasty, early in the 12th century B. C. It is the last great building of the old native Pharaohs, and marks the final effort of a decadent people to withstand the inevitable decline into which they have fallen; a hopeless struggle, after which they sank lower and lower to the end. On the right of the group you discern the great pylons of the main temple, bathed in sunshine-two of them, each divided as usual into two towers, the interval between the towers looking like a notch in the top of each pylon. That is the great temple of Ramses III. On the left of the group, but not at the extreme left, you

[^88]see a square tower standing alone, with two windows on each side. That tower is one of a pair, the other being so in the shadow that you can hardly make it out, which formed the monumental entrance to a great palace of Ramses III, which stood before his temple. The palace was built of sun-dried brick and has perished, but the entrance towers, being of stone, have survived, and to-day form the only specimen of such architecture which we have in Egypt. They are usually called the Pavilion. On the left of the Pavilion you observe some indistinct buildings forming the extreme left of the whole group; these are the ruins of a small temple of the 18 th Dynasty, which was begun nearly four hundred years before the large temple of Ramses III.

We shall now stand on the front wall of brick, of which the Pavilion formed the entrance, and looking almost due north, toward our present point of view, we shall inspect the great first pylon of Ramses III's temple. This next standpoint and our field of vision from it are given on Map 9 by the red lines numbered 77 , which start in the lower left-hand corner of the map and extend north. The particular portions of the temple we are to see are shown by these red lines 77 on Plan 15.

## Position 7\%. The first pylon of Ramses III's great mortuary temple at Medinet Habu (view north), Thebes

This is the best-preserved temple which we have yet seen. We shall meet only two more so perfectly preserved as this-the Edfu temple and the temple of Philæ, which are still before us; but we may compare

[^89]the Denderah temple, also a remarkably perfect structure, which we have already visited. This temple faces almost exactly southeast, so that as we here look obliquely across the front we are facing almost due north (Plan 15). On our right is the southern end of the western plain, beyond which are Luxor and the river (Maps 8 and 9). Before us in a line just outside the extreme right of our field of vision, extends the row of western temples, from the latest here, through the 18th Dynasty in the middle, to Kurna, and its temple of Sethos I at the extreme north. The southern slope of Shekh Abd el-Kurna rises between the pylon and these rough brick, which frame in our field close on the right, but the latter prevent us from seeing the place where we stood as we looked down upon this temple (Position 68). It is further to the right than those tomb openings which you observe in the face of the cliff. The pylon before us was once closed by the palace "outer court," of which this wall, on which we are now standing, was the front. The Pavilion forming the entrance to the palace is on the right, now out of range, but in line with this brick wall beneath our feet, which you will be able to locate on the plan (No. 15). The pylon shows the panels for the reception of the tall flagstaves, as we have seen them before, but the colossal statues of the king, which usually rise before the pylon, are missing. The pylon itself bears two symmetrical representations, one on the front of each tower, outside of the panels. There in relief we see the king slaying his captives before Amon, in a scene exactly like that of Shishak, which we visited at Karnak. The god presents to King Ramses III a list of cities and countries, which covers the whole front of the pylon below them, and embraces almost

[^90]all such names known to the Egyptians, which the accommodating scribe, who put together the list for the king, copied from the similar lists which he found at Karnak, without stopping to inquire whether the king had ever really campaigned in those countries. Perhaps we must pardon the unlimited mendacity of this list, when we recollect that this temple is a chronological record of the reign of this king, which contains some of the most severe wars through which Egypt ever passed, wars in which the king won himself a name and fame which he quite deserved. Few kings have put so much upon temple walls as Ramses III. Those in the rear of the temple, which we cannot see from here, contain records of his great war with the Libyans in his fifth year; that is the oldest part of the temple. In the middle we find the accounts of his dangerous war with the sea peoples of the north, which we shall later view, and finally the front and back of this first pylon bear the records of his second Libyan war in his twelfth year. Thus, as his temple grew from rear to front, the king was always passing through or had juct concluded some great war which found place on the walls. As the architecture of the temple cannot be compared with the beautiful creations of the 18 th Dynasty, we shall not spend any time on the courts and halls, but shall examine some of the more interesting reliefs. Those on this side of the temple, on the outside of the wall, behind the first pylon, are devoted to the peaceful pursuits and religious duties of the king, while those on the other, or corresponding, side are records of the king's wars. On the back of the pylon, where it proiects beyond the side wall, here at the left is a wild bull hunt, which is well worth our inspection, and to
this scene we shall first go. See red lines numbered 78 on our Plan 15.

> Position \%8. The hunting of the wild bull depicted on the temple wall of Ramses III, Medinet Mabu, Thebes

This is one of the most spirited scenes that an Egyptian sculptor has ever wrought. The king, with reins slackened and hanging in a distinct curve from his waist, urges on his plumed horses as they dash after the great bull, plunging through the reeds in the vain endeavor to escape to the river. Poising his long lance ready for the fatal thrust, the eager Pharaoh leans far over the front of his chariot, and as he strains to reach the fleeing prey he has placed one foot out upon the chariot pole, thus disarranging his quiver, which hangs awry beneath the offending leg. Beneath the horses we see one victim brought down upon his back, with the noose of a lasso around his hind legs, and two broken lances in his body; while further away in the thicket is another with head thrown back in the convulsions of death, and feet pawing the air. All this has been caught by the artist with a fine abandon that is admirable. The particular victim pursued by the king, has fallen at the brink of the river, his tongue hangs out in the exhaustion of a long flight, the reeds bending over him offer scant protection, and another instant will see the king's long lance in his throat. The river itself, which occupies the lower right-hand corner, is filled with fish, and towards its curving shores marches a line of the king's archers, some of them assisting him with an occasional shaft. In such pastimes as these the warlike Pharaohs of the Empire were wont to spend their
time, when war, the cares of state or the waning attractions of the harem permitted. Now imagine the river colored blue, the waving reeds green, the bulls a mottled brown with white bellies, the horses white, the Pharaoh brown, with white linen kilt, and the chariot in all the gayest of hues, and you will gain a hint of the original effect of this sculpture. It was no common master who put this scene on the wall, for he has entered into the spirit of the hunt with a sympathy and fine feeling, which far surpass the usual conventionality of such scenes. Upon the common people of that remote day, when the Pharaohs flourished, such temple scenes as this must have exerted a marked influence; and we can imagine the multitude of ancient Thebes standing in awed admiration before these exploits of the Pharaoh, as do these modern descendants of theirs, who insistently offer us the dubious privilege of a drink from their gullehs, or water bottles, always expecting a return in coin for their trouble.

The wall before us, you know, is the back of the first pylon (Plan 15) ; you see the end of the pylon here on the right, marked with its two huge cylindrical beads on the edge of the corner, as the wall slants inward. The angle on the left is formed by the side wall of the first court, of which the pylon before us forms the front. We shall now view some of the scenes outside of this same court, but on the other side. See the lines marked 79 on Plan 15.

## Position 79. Scenes of battle and the chase on the wall of Ramses III's Temple, Medinet Habu, Thebes

This is the massive side wall of the temple, enclosing the second court. Over its hollow cornice you

Positions 78, 79. Maps 3, 8. Plan 15.
can see the back of the first pylon (Plan 15) ; it was just below its further corner, outside of the court on the other side of the temple, that we viewed the bull hunt just now. We are looking almost southward and Der el-Bahri and the tombs of Shekh Abd el-Kurna are behind us, while the river and Karnak are on the left.

How marvelously preserved is this temple wall compared with the walls which we have seen at Karnak. Even the top stones of the cornice are still all in place, and the reliefs have only lost the bright colors which once brought them out with clearness and vigor. We can here gain an idea of the finished appearance of the ancient temples, as well as of the succession of great events, which found record on the temple walls as they advanced from year to year. As we stand, the rear of the temple is at the right and the front at the left; we are looking at the middle portion of the wall, so that the early war of the king's fifth year is out of our field on the right, the scenes before us are of the year eight, and out of range on the left are those of the year twelve. The king's wars thus progress from right to left, as we pass from the rear to the front. At the top of the wall, in hieroglyphs over two feet high, is a long inscription reciting the power and might of the Pharaoh, and below this are exploits which justify this laudation. You see the king's grooms over the door holding the royal horses. The chariot to which they are harnessed is empty and idle, but the usual occupant is far from idle. Do you observe him standing just behind the chariot, a heroic figure towering above all his attendants as with drawn bow he discharges a hail of arrows among the foe? The latter you can hardly dis-

[^91]cern, but they are of the greatest interest; for that apparently bare space before the king and his companions is occupied by a mass of struggling ships, forming the earliest known representation of a naval battle. From here you can make out the forms of the ships, looking like new moons, and one on a level with the king's feet and to the left is especially clear. The enemy who are thus attacking the king's fleet are called "people of the sea" in the inscriptions, and one tribe who were defeated, either at this time or later, settled on the southern coast of Palestine and became the Philistines of Hebrew times. They are Cretans. Others are Sardinians and Etruscans, whom we find for the first time on historical monuments here. Ramses III has already defeated their land forces and is now assisting in the destruction of their fleet. The "people of the sea" from Asia Minor and the Mediterranean islands constituted one of the gravest dangers that ever threatened Egypt. Their invasion was successfully met and turned back by Ramses III, and we may pardon the pride with which he has immortalized the deed upon this temple wall. On the right of the door we see him in his chariot engaged in a lion hunt, a diversion in which he evidently indulged himself on this campaign, for it is depicted among the scenes of the war with the "peoples of the sea." One lion, rolling upon his back, is breathing his last, while another, bristling with arrows, flees into the thicket, closely pursued by the king. Each of the numerous reliefs in this temple is accompanied by inscriptions telling who the enemy are, sometimes where the battle took place, and often exactly how many of the enemy were killed and taken prisoner.

This temple of King Ramses III forms the most complete historical record of a king's reign which has survived to us from this ancient people, for it was the work of one king and not a slow growth through many centuries like the temple at Karnak. But it is the last great monument of the native kings, and it likewise records the last great victories of the Theban Pharaohs. From now on Thebes is distinctly on the decline, and the seat of power is in the north, which we have left behind us, in the Delta, where the Libyans are henceforth gradually gaining the upper hand. We have seen how the expanding halls of Karnak expressed the increasing power of the conquering Pharaohs, but here at Medinet Habu we see Thebes already entering the decline which left her the desolate ruin which we have found her.

We proceed now up the Nile to the ruins of the ancient city of E1 Kab. Turn to our general Map of Egypt, Map 3, and you find this city nearly fifty miles south of Thebes, on the eastern bank of the Nile. The red lines numbered 80 there show that we are to look southwest over the city and the river.

Position 80. Walled city of El Kab, rucient capital of Upper Egypt, southuest from the door of a cliff-tomb

The scene upon which we look, if not one of great beauty, is nevertheless one invested with the greatest interest when we know what we have before us. We have taken up our position in the eastern cliffs, at a point where the river flows northwestward (Map 3); hence we look southwestward from this tomb door across the eastern plain, the river and the fields on

[^92]the other side, to the distant western cliffs. Thebes is now forty-four miles off to our right, Cairo is three hundred and ninety-eight miles away.

That sombre gray wall which we see beginning on the left and extending as far as the eye can follow on the right, is the fortified wall of the city of El Kab, known to the ancient Egyptians as Nekhab. It is the only city wall, practically intact, which has survived from such a remote age, in any country; for it was erected at least in the days of Abraham, not less than 2,000 years before Christ, and possibly much earlier. You will not wonder that it has survived when you know that it is nearly 40 feet thick. The river has cut off one corner, but otherwise it is almost intact. It encloses a space over 1,800 feet long and almost as wide. The interest and importance attaching to the city are due to the fact that it was the capital of that enormously ancient kingdom of Upper Egypt, which existed here before it was united with the Delta kingdom, and the two kingdoms merged into one nation of Egypt. In yonder city, dwelt the rulers of this remotest kingdom. Their divinity was a vulture-goddess, and when the two kingdoms were united she became the patron goddess of Upper Egypt. If you will turn back to the battles of Sethos I on the Karnak wall (?osition 62), you will see there hovering over the king's head the vulture-goddess of this city, with wings outspread in protection over his head.

In historic times the strong city which stood here was the seat of a family of powerful barons, who had much to do with the rise of Thebes. They assisted the Theban princes in expelling the Hyksos, and were the particular favorites of the Theban Pharaohs in the days of their power. We may indeed call them
also, as we did those of Assiut, the "king-makers" of ancient Egypt. Their tombs filled the cliffs here all about us, and the walls of these chambers bear many a heroic story of battle and victory in the Pharaoh's cause, for these nobles, choosing for life the profession of arms, entered the Pharaoh's standing army, and the local baron of the feudal age is gradually metamorphosed into the royal official, living at court and serving in the royal army. These tombs, therefore, signalize for us the transition from the Middle Kingdom to the Empire, from a feudal to a military empire, like that of Napoleon. How utterly all those ancient political and social changes have vanished, as far as the people of the valley at the present day are concerned! If you were to ask one of these native watchmen about all this, he would look at you vaguely and say that the tombs were made by the "people of Pharaoh," and they may have lived even before "our lord Mohammed." Of the people of Pharaoh he has heard in the Koran, but he does not know that he is himself a son of that very people, with the blood of the antique princes of this city flowing in his veins.

On the opposite, or western side, of the Nile, a few miles further to our left (south), than we can now see, is the temple of Edfu, which we shall visit next. See Map 3. Our first position will be on the west side of the temple, from which point we shall look east over the great pylons and the Nile. See the Plan 16, on which the lines numbered 81 show just what portion of the temple we are to see.

## Position 81. The pylons and the court of the Temple of Horus at Edfu (looking east to the Nile)

One might almost expect to see the gorgeous procession of the god moving out across the court so perfect is the condition of this temple. Indeed, there is no ancient temple which can compare with it in preservation, for with the exception of the lost colors, it is almost as it came from the hands of the architect. It is, to be sure, not the oldest of the Egyptian temples, dating, as it does, entirely from the Ptolemaic epoch. There was, of course, a much older temple on this spot, but this present building was begun by Ptolemy III in 237 B. C., and the building was completed as it now is in 57 B. C., having been 180 years in course of construction.

We are now approaching the sandstone region, and this temple is constructed of sandstone, although those which we have thus far seen were chiefly limestone, with some granite trimmings. This building is exactly in a north and south line, so that the pylon on our right faces the south. We are looking across the court eastward, to the palms that fringe the river, and the eastern cliffs rising behind them (Plan 16 and Map 3). Behind the temple are a few whitewashed houses of modern Edfu, with a palm or two swaying lazily in the courts; while at the right rises the minaret of the modern village mosque, not by any means in as good a state of repair as the temple we are about to enter. This is the first Ptolemaic temple we have visited, although the temple of Denderall was begun under the Ptolemies; but we could not see the rear halls which they erected. We must therefore note one point which distinguishes it from the temples of the Empire. You notice that the colon-
naded portico around the court, extends also across the front of it, along the back of the pylon. This feature we have not seen before, and as we shall observe from our next point of view, it is paralleled by a corresponding change at the rear of the court.

The top of these splendid pylon towers affords a view of the temple and the surrounding country, and we shall later take up our position there and look along the axis of the temple toward the north (our left), in a line at right angles with our present line of sight. The top of the towers is gained by a staircase within; two doors in the back of the pylon leading from these inner staircases to the top of the wall of the court before us, you can clearly see from here. Higher up, in the back of the pylon and here at the end are the windows by which the stairway of 242 steps is lighted. The monotonous reliefs on the pylon, repeated. over and over again, represent King Neos Dionysos, the thirteenth Ptolemy ( $80-52$ B. C.), offering before Horus and Hathor, and their son, the young Horus, the divinities of this temple. For the Ptolemies did not record their warlike exploits on the walls of their temples, as did the early Pharaohs; but there are interesting records of the building of this temple on the wall before us a little further to the left.

Immediately in front of this wall is a section of sundried brick construction, part of a house built against the temple. The accumulations from such houses had almost completely covered the temple, so that little but the two pylon towers was visible, until it was excavated by Mariette. We are standing on such accumulations outside of the circle of excavations, and you can see on the extreme right the stairway which leads down from the surface of the rubbish to the level of

[^93]the ancient pavement in front of the door, by which we are able to enter for the ascent of the pylon.

We will ascend now to the far side of this nearer or western pylon and look sharply to our left or north over the full length of the temple. This new position and our field of vision are given by lines marked 82 on both Plan 16 and on Map 3.

## Position 82. The wonderfully preserved Temple of Edfu, seen (north) from the top of the first pylon

What a superb landscape! The broad plain, broken up into fertile fields and sprinkled with graceful palms and fleecy acacias, merges into the ample bosom of the river, with its picturesque sail, behind which the yellow cliffs mingle with the pale skyline beyond. The soft lines of the landscape contrast strongly with the sharp rectangular contours of the houses of the town, some of them looking very modern indeed with glazed windows and hinged shutters. With the exception of such modern innovations as these, it is not probable that the appearance of the town was very much different, when this temple was built; or when its less pretentious predecessor of far earlier date was erected. As far back as we can trace the Egyptian, he built houses of sun-dried brick, and the remains of such houses still surviving point to structures, like those of the town before us. We need only imagine a few chateaus of the wealthy or of the local nobles, with their surrounding gardens, to complete the picture.

We stand, you remember, on the left or western pylon and look northward (Plan 16). As we are not exactly in the axis of the temple, we look diagonally along its length, and see more of the right than of the

[^94]left. On our right is the river, which we see lower down, on its long journey to Cairo and the sea; on our left is the western desert; while behind us is the first cataract, now but sixty-eight miles away. Here at our feet is the first court again, which we saw from a point now out of our field of vision, here on the left. You notice on the right the colonnade of the portico which surrounds the court. Behind is the vestibule; for you see that the section of the portico, which in the older temples extended across the back of the court, has now been raised and pushed back out of the court to form a colonnaded vestibule leading to the hypostyle, which lies still further back. This vestibule contains some beautiful columns, especially the two with palm capitals, in the front row, in the middle of each side. This front row is engaged with a balustrade, which separates the vestibule from the court outside. Several blocks in the roof over the central aisle have fallen in, and another which is cracked across the middle has been supported by an iron rod to prevent its threatened fall. Back of this vestibule as you will see on the plan (No. 16) is the hypostyle. You can dimly see its door if you look down the central aisle, for the vestibule has, behind the front row, but two rows of columns (larger than those in front), and behind these is the door of the hypostyle. It is not so large as the hypostyle at Karnak; for the Ptolemies, even had they felt inclined to do so, could not have diverted from the treasury such enormous wealth as was required to erect works like those of the great Pharaohs; nor did they command the captive labor necessary. You can see how the roof drops from the vestibule to the hypostyle, back of which are two
smaller vestibules, or ante-chambers, which give access to the Holy of Holies. You can locate this tast very easily, as two of the blocks in its roof have fallen in, out yonder in the middle, making a hole so symmetrically placed that it looks as if it were an intentional skylight. But such is not at all the case, as we shall see later on. Under the roof around that hole, and grouped, as you can see on the plan, are the minor chambers of the temple. This entire section of roof is surrounded by a high wall, making of it an openair court, which was shaded with canvas, and added much to the roominess of the temple. Surrounding the entire temple, behind this first court at our feet, is a massive girdle wall, which greatly increases the security of the building. It is among the latest additions to the temple, while the chambers in the rear, which it surrounds, are the earliest in the whole structure.

Could we here restore the color to these gray stones, could we recall the vanished temple garden with its wealth of tropical verdure in which the temple was embowered, could we reanimate a generation of the priests, who sleep in the neighboring cemetery, and with them the multitude, crowded about the great altar which once stood in this forecourt, could we hear the voices of the priests mingling with the hum of the populace, and smell the fragrant clouds of incense that once rose daily from this court-if we could do all this, then the work of the architect, dropping into its proper place in the life and thought of the people, would assume far higher functions than we are now able to associate with the silent courts and deserted halls, exposed to the prosaic gaze of every wandering tourist, and clothed with none of the sombre mystery
and solemn beauty, which it always conveyed to the Egyptian, whose god it sheltered.

And now we shall penetrate where never an ancient Egyptian, save the High Priest or the king, was permitted to stand, into the Holy of Holies, lighted now by that square hole, the further of the two which we see in the roof. See the lines marked 83 on Plan 16.

## Position 83. The Holy of Holies and the granite shrine for the divine Image in the Temple of Edfu

This broad band of sunshine falls through the square hole in the roof which we saw but a moment ago from the top of the pylon tower. For we are now standing, as we then said, where only the king and the high priest were allowed to enter, in the Holy of Holies of the great Horus temple of Edfu. What would the priestly custodians, who kept this place inviolate, have said could they have known that our profane feet would one day desecrate this place? Here we may enter, with none to stay us, where the sacred processions stopped, as the High Priest went in to perform the daily ritual before the god in the holy place, while on great feast days, a multitude of this man's ancestors thronged the court outside. They were simple villagers like him, but they never saw the interior of this holy chamber. When was the last service performed here? The edict of the Roman emperor Theodosius in 378 A. D., forbade all further worship of the old gods, enjoined the closing of all their temples and at least nominal adherence to Christianity; and this was less than 350 years after the death of Christ. But although this edict was enforced in Lower Egypt, in the Delta, which we have left over 400 miles down

[^95]river, it could not at that time be enforced here in Upper Egypt. The service of Horus in this temple may have gone on for a hundred years more, languishing year by year as the temple revenues decreased, until it finally ceased altogether some time in the 5th century after Christ. By that time all the splendid temples we have seen were deserted, converted into Christian churches or filled with the wretched brick hovels of the ragged and filthy poor.

We are standing just outside the door of the chamber, and you see the doorpost of the entrance door on the right (Plan 16). The pavement, so long untrodden by priestly feet, is in places sunken and depressed. The walls are covered with the closely written hieroglyphs of the Ptolemaic age, rude and careless compared with the beautiful writing of the classic 18th Dynasty. The reliefs are only monotonous repetitions of what we saw on the first pylon, that is, the king before one of the gods of the temple, making offering and sacrifice. On the left is the very shrine in which the sacred image of the god was kept, now open, bare and empty. It is cut out of one block of granite from the first cataract, and you see round the edge of the doorway, the jamb against which the solid bronze door once closed. It is covered with religious inscriptions, and over the door we see the sun-disk, with the sacred serpents hanging down on either side of it.

Such a shrine must have been a splendid object before it was stripped of its adornments. Ramses III thus describes one which he made for the temple of Karnak: "I made for thee a mysterious shrine in one block of fine granite; the double doors upon it were
of copper in hammered work, engraved with thy divine name. Thy great image rested in it, like the Sun-god in his horizon, established upon this throne unto eternity in thy great and august sanctuary." Ramses then goes on to describe the splendor of the ritual vessels used in the service of the god. The most magnificent vessels were brought before him, wrought of silver and gold, and inlaid with costly stones; while the ornaments, which it was the king's duty to attach to the figure of the god in this shrine, were of the most costly workmanship. We can form but a very meagre conception of the riches which the chambers around us here on every side, once harbored. But the wealth of these priesthoods has now all vanished, and the once richly filled chambers now stand bare and empty like this shrine. To one who knows what was once here, it is a melancholy experience to stand in this place; but we have still several hundred miles of river to traverse, and we must leave it to the sombre memories that throng so thickly about it.

The next stage of our journey will take us to Assuan. On Map 3 you will find Assuan, nearly seventy miles south of Edfu and on the opposite or eastern side of the river. Our Map 17 gives its location and environs in more detail. The lines marked $8 t$ on this map show that we are to stand first on the western river bank and look south.

## Position 84. Assuan and the Island of Elephantine (south) from the western cliffs of the cemetery

At last we have reached the first goal of the Nile tour, the first cataract (Map 3). You cannot see it from here, but it is just over yonder on the right above
the islands beyond the two native boys. Our position is on the western cliffs, which you notice drop almost sheer to the water's edge, and we look southward across the river, the northern end of the island of Elephantine (the larger one), the little "Island of the Sirdar" in the foreground, and the modern town of Assuan on the other or eastern shore (Map 17). That boy faces down river, that is, northward; before him sixty-eight miles away is Edfu, from which we have just come. On the other shore you see the wild and tumbled surface of the eastern desert stretching far away to the desolate horizon; behind us is the Sahara, even more melancholy and forbidding. Some sixty-five miles below Assuan, that is, just after leaving Edfu, we passed out of the limestone, and we are now standing with sandstone beneath us, of which these rugged rocks (on the right) are excellent specimens. The town on the other shore has long marked the southern limit of Egypt proper, and does so still. Its name, Assuan, more properly Aswan, is very ancient. It is mentioned in the Old Testament (Ezekiel xxix, 10 ; xxx, 6), and was known to the Greeks as Syene, but already occurs long before Greek or Old Testament times in the Egyptian inscriptions. It is now a garrison town, and possesses several hotels.

The important town of early Egyptian times was located on the large island out there, at its further end. These buildings at this end are a hotcl and a British Army hospital, but behind the masses of trees at the other end lie low ruins, heaps which have grown from fallen brick houses, such as we have seen so often before. The town, like the island, was called "Elephant town" by the early Egyptians themselves, and
the Greeks did likewise, merely translating it as "Elephantine." Far back in the days of the pyramid builders it formed the southern frontier town of the kingdom, through which passed the trade of Nubia in ebony, ivory (explaining the name of the place), gold and ostrich feathers. The nobles who lived here were employed by the Pharaoh in trading expeditions in the remote south, perhaps as far as Sudan. They were the frontiersmen of that ancient day, and many are the adventures which they passed through. Family letters of these remote borderers have been found in the ruins of their houses on the island. They are now preserved, written on papyrus, in the Berlin museum, and in them one may read the same names which we shall find in the rock tombs beneath us. For we are now perched on the cliffs, in which these nobles excavated their tombs, and in these tombs they have recorded some of their more notable achievements in war and travel.

We shall go down now to look at one of these tombs in the cliffs beneath us. See the lines numbered 85 in the upper portion of Map 17.

## Position 85. Tomb of Harkhuf, a frontier baron in the days of the pyramid builders, Assuan

We have seen the island where these adventurous noblemen lived their strenuous lives; we have now before us the tomb, in which one of the most noted of them was buried. Above is the crest of the cliff, where we have just been standing; we look westward, and the river, with Assuan and the islands, is behind us (Map 17). This door gives access to a chapel chamber such as we have so often seen before,

[^96]and after tarrying so long with the Empire and later times, it ushers us again into the age of the pyramid builders of the Old Kingdom. The man who built it, a nobleman named Harkhuf, lived under the kings of the 6th Dynasty, the last family of the Old Kingdom. The place where we now are was then a region liable to frequent invasion from the turbulent Nubian tribes, and it was the business of such noblemen to maintain the frontier and superintend the traffic of the Pharaoh with the regions of the south.

Directly before us on the front wall of this tomb Harkhuf has left a remarkable record of his life, telling us the adventures incident to his active career, as he served the Pharaohs of 4,500 years ago. He narrates his great trading expeditions, which he personally conducted, as the earliest African explorer of whom we know anything. At one time he pushed southward and westward into a distant region which he was seven months in reaching, and which may well have been the Sudan. He discovered one of the pygmies, which have so astonished modern explorers of Africa, and brought the tiny midget back to Egypt with him. This so delighted the king, that he wrote Harkhuf a special letter, expressing his gratification and warning the noble to see that no harm came to the dwarf on the journey down the river to the court at Memphis. It seems that this curious little race was known to these early Pharaohs, and that they loved to keep them at court as dancers. So King Pepi II wrote Harkhuf thus: "When he goes down with thee into the vessel, appoint trustworthy people, who shall be in charge of him on each side of the vessel. Take care lest he fall into the water. When he sleeps at
night appoint trustworthy people, who shall sleep beside him in his tent. Make an inspection ten times at night. My majesty desires to see this dwarf more than the gifts of the land of Bite and Punt. If thou arrivest at court, having the dwarf with thee alive, prosperous and healthy, my majesty will do for thee a greater thing, than that which was done for the assistant treasurer Burded in the time of King Isesi." The king has already stated that King Isesi, one of his great ancestors of the 5th Dynasty, had possessed such a dwarf. Thus we see that the pygmies were already known to the older kings. Harkhuf was so proud of this letter, that he had it engraved on the front of his tomb; and to this fact we owe the preservation of the oldest royal letter in the world. But as the space on each side of the door was already occupied with his biography, he was obliged to smooth off a place for the letter on the right side of the tomb front. You can see part of that space with one line of the letter on the extreme right.
A stirring romance might be made out of the adventures of the nobles buried around us. One of them named Sebni tells how his father, Mekhu, was killed on an expedition into Nubia like those of Harkhuf, and how he went to rescue his father's body for embalmment. He carried out the hazardous undertaking successfully and returned with the body laden on an ass, to Elephantine, where it was embalmed by the king's own embalmers. Another tells how he was sent to the shore of the Red Sea to secure and bring back the body of a noble, who had been killed by the Beduin Arabs, while building a ship for the voyage to Punt. It seems incredible that after 4,500 years, these

[^97]same regions have been made safe for trade and exploration only within the last few years. You see, then, what stirring tales fill these cracked and weathered sandstone walls. They are eloquent witnesses of those grand old days, when the people of this valley were on the rise, with a splendid destiny before them, which the restless energy of just such men of initiative as these earlier fronticrsmen, was rapidly bringing in.

On the southeast side of Elephantine Island is a Nilometer, a most interesting device for measuring the inundations. We go there now and shall be looking north. See Map 17.

## Position 86. The Nilometer, the measurer of inumdations, Islaml of Elephantine, First Cataract

After ages of use, this ancient instrument was cleaned out and restored to service by Ismail Pacha in 1870. It is very important at each stage of the inundation, to know whether the rise is equaling that of good years, or whether it is likely to fall short and cause famine and distress. As far back as the 19 th century B. C. the kings of the Middle Kingdom recorded the height of the inundation year by year on the rocks above the second cataract, and those records are still there. It is difficult to determine how old this instrument on Elephantine is, but it is at least over 2,000 years, for Strabo, the great geographer of nearly 2,000 years ago, visited here and described it accurately, and his description, quoted in all the guide books, is still good. He says: "The Nilometer is well built of regular hewn stones, on the bank of the Nile, in which is recorded the rise of the stream, not only the maximum, but also the minimum and average rise,
for the water in the well rises and falls with the stream. On the side of the well are marks, measuring the height sufficient for the irrigation and the other water levels. These are observed and published for the general information. . . . . This is of importance to the peasants, for the management of the water, the embankments, the canals, etc., and to the officials on account of the taxes. For the higher the rise of the water, the higher are the taxes." Down at the bottom where the boy stands, the masonry is open to the river, so that, as Strabo says, the water in here rises with the rise of the stream. You can see the graduated marks of which he speaks on the side wall, marking the depth at any given level of the surface. The one at the top, with oblique lines of white spots is modern Arabic, and the Arabic marks continue all the way down. This instrument is not arranged to measure the lowest levels of the river, which are of no practical importance, and thus as you will see by a glance at the water outside, it falls far below the lowest scale of this Nilometer. When it is at its lowest, the surface of the river outside is 49 feet below this highest mark here, which it reaches after it has risen and entered the Nilometer. This is nearly twice as much as the difference between highest and lowest level at Cairo.

We are here on the east side of the island, at its southern end, and you will find the Nilometer marked on the map (No. 17). We look northward, the island is on our left, and the channel which separates it from Assuan is on our right. Behind us is the cataract. You have already noticed these swarthy inhabitants of the island. There are two villages of these people here, and you observe, especially in the face of the

[^98]child on the extreme right, the African features and the darker hue of the skin. These are not Egyptians; we are here meeting our first Nubians, not speaking Arabic like the Egyptians, but the ancient tongue of Nubia, which they have spoken unbrokenly since the days when their forefathers made this frontier dangerous for the nobles and officials of the pyramid builders nearly 5,000 years ago. Here, then, we make the transition from Egypt proper to the land of Nubia, and it is of importance to note, that whereas the Egyptian no longer speaks the language of those tombs which we have just visited, his former adversaries up to the very town which they once made precarious, still hold fast to the ancient tongue, which the Pharaoh's officers found here.

The granite quarries where the Egyptians found stone suitable for their buildings lie near 'us here on the east bank of the river. We shall go now a few miles south of Assuan, where we can see a great unfinished obelisk just as it was left by the early Egyptians.

## Position 8\%. Ninety-two-foot obelisk still lying in the Assuan granite quarry at the First Cataract

Recall the huge obelisks which we have seen at Heliopolis, Karnak and Luxor, for we are now in the quarry from which those vast monoliths came. This prostrate giant has never known what it is to stand, for he is still a part of Mother Earth, from which he has never been separated. If he could be placed erect, he would show a stature of 92 feet, which would place him among the tallest obelisks known. At the large
end this shaft is $10 \frac{1}{2}$ feet thick. All the obelisks that we have seen once lay here as you see this one.

The method of separation from the rock of the quarry is interesting. A row of holes was drilled along the lower edge, where the obelisk joins the quarry rock; into these holes wooden wedges were firmly driven, and water was then poured into the wedges. The capillary attraction, or what is ordinarily called swelling of the wood, then gently but irresistibly forced off the obelisk and cracked it from the native rock beneath. It was then dragged upon a huge sledge to the neighboring river, and loaded upon a barge preparatory to floating it down the river. You remember that the barge of the architect Ineni for the 76 -foot obelisk of Thutmosis I was 200 feet long and onethird as wide. The reliefs of Queen Makere at Der el-Bahri show two of her obelisks being towed upon a huge barge, of which the dimensions are not given, but the galleys by which the barge is towed are 30 in number and have on the average 32 oarsmen in each, making some 960 oarsmen in all. As far back as the earliest dynasties or earlier, the Egyptians had learned the excellence of this Assuan granite, which fortunately for them crops out through the sandstone here at the first cataract; and (although at first under convoy of warships for protection against the hostile Nubians), they quarried it here at the dawn of history. A nobleman of the 6th Dynasty boasts that he was able to quarry here with only one warship, as if such a thing had never been done before. We saw this granite in the monumental gate called the temple of the Sphinx, built in the Old Kingdom, and it was commonly employed for the finer and more important parts of the pyramids, like the chamber in the great

[^99]pyramid where we saw the sarcophagus of Khufu.
The masses taken in one block from this quarry seem almost incredible in view of the limited knowledge of mechanics then possessed by the architects of the Pharaohs. Recall the colossus of Ramses II which we saw at the Ramesseum at Thebes, which was $57 \frac{1}{2}$ feet high and weighed 800 tons. That statue is of granite; it was quarried here and floated down the river in the same way. But when we recollect the 92 -foot colossus of Tanis, which must have weighed some 900 tons, which was likewise taken out here, we shall realize what a place of mechanical miracles this quarry was. For centuries it has been silent and deserted, or has served to satisfy the curiosity of visiting tourists, who, like this one here, with notebook in hand, have recorded the marvels left by the Pharaohs. North of us here, there is a colossus of Amenophis III lying on its back unfinished. The throne alone is over 12 feet high. A huge sarcophagus, also unfinished and evidently of Ptolemaic date is near by. The largest and heaviest of the surviving unfinished monuments in the quarry is the obelisk before us, for it must have weighed in the vicinity of 350 tons. What would not the archæologist give if he could see it rise from the rock to which it is bound, creep down to the river, float away on its long voyage, and struggle slowly upright before the pylons of some temple on the lower river! To watch the swarm of workmen from the Pharaoh's quarries accomplish a feat like that; to stand beside the vast monolith during every moment of its progress, notebook in hand-that would be a revelation which would immediately clear up many mysteries and save the archæologists volumes of discussion.

Over on the island of Sehel there is an inscription of unusual interest which we must now see.

## Position 88. Remarkable inscription of a secen years' famine, on the Island of Sehel, First Cataract

The inscription before us is on an island in the very middle of the cataract. The cataract is about five miles long; at its lower end is Assuan and the Island of Elephantine, which we saw from the opposite heights, while at its upper end lies the island of Philæ (Map 17). The channel of the river along the whole length of the cataract is filled with granite islands, which are indeed the cause of the cataract. The rocks on these islands are covered with inscriptions; they form the most ancient and the most interesting visitors' book in the world. As the power of Egypt waxed, and she gained more and more fully the control of Nubia, these records increased in number. Now it is the Pharaoh himself, who records in terms of pride and boastfulness the passage of the cataract on his return from some successful campaign against the Nubians; again it is some officer of the king who has come to take out stone from the quarries; now it is a celebration of the king's jubilee, which the prince in charge has successfully managed; and again it is the clearance of the canal through the cataract, which existed here probably as far back as the Old Kingdom; or if the faithful official has no great achievement to record, as he passes he has carved a relief showing himself doing obeisance to the king. Thus century after century and dynasty after dynasty from 2700 B. C. onward through Roman times, kings and nobles, scribes and officers on various missions to or from Nubia, have here left their records on these rocks. Indeed, much

[^100]of the history of Egyptian conquest and government in Nubia may be read on these rocks.

The inscription before us is important in itself, but especially interests students of the Old Testament because of its reference to a seven years' famine in Egypt. The document purports to be an official communication from King Zoser of the 3rd Dynasty, whose terraced pyramid we saw at Sakkarah, addressed to a prince of Elephantine, telling the latter of the king's great anxiety because the Nile had not risen, and there had been no inundation for seven years. Unable to account for this, the king had summoned to his presence one of his great wise men, Imhotep by name, and had questioned him regarding the gods of the Nile, who controlled its sources and the inundation. The wise man consulted his books and returned to the king with a report that the god Khnum was the controlling divinity at the cataract whence the inundation, according to Egyptian belief, came. He described to the king the wealth of the cataract region in minerals and building stone, and told him that all this belonged to Khnum. The king, overjoyed, ordered a sacrifice to be offered to the cataract god, and that night, in a dream, Khnum appeared to him and promised to cause the regular and unfailing rise of the Nile thereafter. In gratitude, the king then sent the communication containing this narrative to the prince of Elephantine, with the decree, that the two shores of the river from Elephantine to a point some sixty miles above it should belong to Khnum. In late times, under the reign of the Ptolemies, the priests of Khnum in this region found it wise to brush up the claims of their god in this district, and they therefore revived the ancient title to it given their ancestors 3,000 years earlier by King

Zoser. Hence this remarkable inscription before us is not the original document of King Zoser, but a revival of it by the priests of the god on this island some 3,000 years later than Zoser. The seven years' failure of the Nile, of which it tells, occurred, according to the document, probably some 1,200 or 1,300 years before the time of Joseph, but it is interesting to find that such an occurrence was not an impossibility in time long before the Hebrews ever saw Egypt. In later time, also, the same thing has occurred, for there was a famine of seven years' duration which begun in 1066 A. D. under the Fatimids. In the rectangle above the inscription is a rough relief showing the old King Zoser standing at the left, and offering to the three divinities of the cataract, Khnum, Satet and Anuket, who may be recognized by the long sceptres in their hands. The inscription has been here over 2,000 years, and you observe how the top of the granite boulder has cracked and lifted clear across the lines of the text; but nothing is lost except where a few pieces have chipped off at the edge of the crack. The number " 21 " has been appended by savants for convenience of reference.

We are now to have the privilege of visiting probably the most beautiful place in Egypt, the island of Philæ. It is a small island which you will find in the lower portion of Map 17, set in a decided eastern bend of the Nile. We are to stand, as the lines marked 89 show, on the shore just north of it, and look directly south. This position is also given on Map 18, which gives the island on a larger scale.

## Position 59. The templed island of Philo, tike "Pearl of Egypt," now doomed to destruction (view south)

Words add little if anything to the impression left by this lovely spot. Set like a peerless gem among the wild, desolate rocks of the cataract, still softened and enriched by the swaying palms, in which every Egyptian temple should be framed, this temple and its island have preserved and still awaken more of the romance of the Nile than any other spot in Egypt. And yet as we shall see it is condemned to certain destruction. We are facing exactly south, remember, and our position is at the southern, that is, the upper end of the cataract (Map 17). Behind us are Assuan, Elephantine and the tombs of the frontier nobles; between them and us lies the whole cataract. A glance at the map will show you that Philæ is one of the uppermost group of islands that form the cataract. The rocks which rise here on the right are part of the larger island of Bigeh, while the opposite shores are on the east side of the river, which curves sharply on our left around the island and appears behind it. That little square stone building on the right, is the house of the custodian of the island. Just in the middle of our prospect you observe the pylons of the temple of Isis; they face the other way, that is, toward the south, and the rear of the temple is at this end (Plan 18). The first of the two pylons is the larger, and it forms, from our point of view, the background of the second pylon, which being of the same form and color as the first, does not stand out very clearly against it. But if you look carefully you will be able to distinguish it, especially if you begin with the righthand tower, which covers a large portion of the right
tower of the further, or first, pylon. Before these pylons, as we stand, but, of course, in reality behind them, you will discern the two rectangular masses which, extending this way, contain the halls and chambers. The little building on the left of the temple is the lovely columned kiosk, which is so fondly remembered by all Nile travelers. We shall see more of it from our next point of view. On the left shore you notice a piece of squared masonry, which formed part of an ancient quay of the town, once occupying the island. All this work, and all these buildings are late, compared with most of the temples which we have already seen on our voyage up the river. There must have been a shrine of Isis on this island long before the present temple was built, but it could not have been a notable building, for Herodotus, in his visit to Egypt in the middle of the 5th century B. C., did not see anything here which he considered worthy of note. At any rate, he is silent concerning the island, now so famous, and the earliest mention of the place in the Egyptian inscriptions is about the middle of the 4th century B. C., a hundred years after Herodotus's visit. No portion of the buildings at present preserved is older than 350 B . C., just before Egypt fell into the hands of Alexander the Great.

Look long and well at this island and its temple, for it conveys a more adequate impression of how an Egyptian temple actually appeared in the days of the Pharaohs than any surviving building on the Nile. But the shouting native in the boat below, vociferously offering his craft for our passage over to Bigeh, interrupts our reveries. Those high rocks on the extreme right offer a fine view of Philæ, and taking this

[^101]boat, after long haggling over the price, we shall presently stand there and overlook the island.

We shall then look across the island toward our left, or toward the northeast, as the lines marked 90 on Maps 17 and 18 show.

## Position 90. Looking down (northeast) upon the island of Phitce and its temples from the islund of Bigeh

Perched high on the granite rocks of Bigeh we overlook Philæ and the point behind it from which we viewed it before, out there in that group of palms beyond the island, flanked by the modern buildings on the further shore. You now obtain some general idea of the extent of the island. It is 1,500 feet long and nearly 500 feet wide, the longest dimension being about in a north and south line. We are now on the southwest around it, rises into a desolate plain, flanked by the buildings. The eastern shore of the river curving of the island and are looking northeastward across its granite hills, through which the Nile has had to force its way. It is this setting of wild nature which so enhances the effect of the architecture on the island. Over on the right is the square kiosk, which the natives call "Pharaoh's Bed." It has no roof, and it never was finished, but it is one of the gems of the place, even though it dates from the Roman age. The columns rise out of a surrounding balustrade or screen wall; all the forms are of the simplest, yet they make up a slender and graceful composition which most travelers remember with more pleasure than anything else on the island. The building with the large pylon is the Isis temple. It is the result of slow growth, having begun with the
modest chambers in the rear under Nektanebos, about 350 B. C. He also built this little vestibule, several columns of which you see by the obelisk at the hither end of the long colonnade; but it was carried away by a high Nile and had to be restored by the Ptolemies.

In these buildings, then, we can trace, better than anywhere else, the transition from the old days under oriental Pharaohs, to the domination of the Greek dynasty of the Ptolemies. That little obelisk is one of a pair; the other has been carried to England, but its base you can still see from here some 25 feet to the right of the standing obelisk. They were erected in the time of Ptolemy IX, called Physcon (died 117 B. C.), and they are of especial interest because the one now in England was the monument which enabled Champollion to take the first steps in his decipherment of the hieroglyphic, before he employed the Rosetta stone. A Greek inscription on the base appeals to Physcon and his queen, Cleopatra, that the priests of this temple may not be obliged to entertain the numerous state officials who imposed themselves upon the hospitality of the priesthood.

The fine colonnades leading up to the temple are of Roman date, and you can read in the reliefs the oftrepeated name of Augustus, or of Tiberius, under whom Christ was crucified. The nearer of the two colonnades is concealed from us by the back wall, built up over the river. It is 300 feet long and has a row of thirty-one columns 16 feet high; the eastern colonnade, the further of the two, is unfinished and has but sixteen columns. Landing here at the southern end of the court so enclosed, the pilgrims entered between the two obelisks, and many an imposing procession in

[^102]honor of the great goddess must have moved up between these colonnades. The door in the middle of the first pylon enters a court behind it, while the one in the left-hand tower is the entrance to a "birth house" like that of which we spoke at Denderah (Position 46). Between the towers of the first pylon you can discern one of those of the second, with its opening above the channel for the flagstaves, like those in the first pylon. Behind that second pylon lie the hypostyle, the Holy of Holies and the surrounding chambers. The space unoccupied by the temples and their enclosures was taken up by the town, which was excavated in 1895-6, some of its streets may still be followed by the casual visitor, and the excavators were still able to plot the ancient town (see Plan 18). You see the rubbish from these excavations dumped into the river through the windows in the wall opposite us.

In the town were chapels of minor gods, but Isis was the great divinity of the place. The fame of her power had spread far and wide, and in classic times she was worshiped from the Danube and the Seine to the upper cataract of the Nile. Roman ladies journeyed to this shrine to carry home the sacred waters that bathed the island. So powerful was the priesthood of this temple that the edict of Theodosius in 378 , forbidding the continuance of all pagan worship in the Egyptian temples could not be enforced here, and it was not until the reign of Justinian (527-565) that the people of the locality ceased to worship the great goddess. Her worship may have continued surreptitiously even after this, but the temple, or at least portions of it, was used as a Christian church for a long time after Justinian's reign.

This island of Bigeh, where we are now, was also inhabited in the Pharaonic days, and the fragmentary ruins of a small temple of Hathor are just outside of our present prospect on the left.

There is a beautiful view from the top of the righthand tower of the first pylon, from which point we may see something of the cataract and the modern danger which threatens Philæ. There, then, we shall presently stand. This position is given by the lines numbered 91 on Maps 17 and 18.

## Position 91. The great Assuan dam (northwest) from the first pylon of the Philae Temple

That long, low wall out there means bread for the peasant, but destruction to this beautiful monument of his ancestors. Millions of cubic yards of the great life-giving river run to waste in the sea, without having benefited the land at all, beyond having rendered the service of cooling the hot air of the valley as it passed through. It is imperative to stop this annual waste of water in a practically rainless land; hence the barrage below Cairo, the dam, which we mentioned at Assiut, and this great barrier which you see yonder, the greatest dam that ever was built. The foundation stone of the vast structure, which is a mile and a quarter long, 100 feet high at the deepest part and 88 feet thick at the bottom, was laid on February 2nd, 1899, and it was completed in the autumn of 1902, a year ahead of contract time. It is entirely of granite, and is controlled by a set of sluices, 180 in number. The water can be raised 65 feet behind it, and there is thus collected all around us here a lake containing, roughly, as much as Geneva Lake in Switzerland.

This is then discharged gradually after the inundation has subsided in Lower Egypt, and it is estimated that not less than $\$ 13,000,000$ will be added annually to the wealth of Egypt by the recovery of otherwise waste lands made possible by thus husbanding the water. But meantime what will become of this beautiful island? Only the tops of these buildings will project from the water, for its surface will rise to the top of that heap of earth on the left where the two men stand. When the addition to the dam, a contemplated increase in the height, is completed, the temples will be largely submerged. It is, therefore, only a matter of a comparatively short time, when this lovely spot will have become a mud-covered, desolate waste, with the ruins of its once picturesque temples, rising in shapeless heaps, and eventually disappearing. When this project was first suggested, it roused the indignation of the whole cultured world, and in the face of universal protests the government constrained the engineers to alter their plans so as not to totally submerge the temples. But the changes were not sufficient to save the buildings, as the engineers probably very well knew, but they pacified the public; and when we shall have grown accustomed to the pending destruction, the dam will be raised and the work of annihilation will be complete. Undoubtedly the work is a necessity, but it will not be a pleasant item for the future Englishman to read in his guide-book, that the great dam at this point, while insuring the payment of all interest on Egyptian bonds, resulted in the destruction of the temples on Philæ.
You will notice on the Map 17 and Plan 18 that as we now stand on the left, or western, tower
of the first pylon of the Isis temple, we look northwestward down the channel of the cataract, or better, down on the several channels into which it is divided at this point. The rocks on our right are the east shore; on the left is the northern part of Bigeh, and in the channel before us, on a line with the long row of sluices in the huge dam, is the small island of Shellal. You see that the cataract does not at all resemble what we usually understand by that term, but is merely a rapid or series of rapids, caused by the outcropping of the granite at this point. The channel is thus filled with granite islands for five miles to Assuan below us. It was on one of these islands, Sehel, that we saw the inscription of the seven years' famine. Down at the right we have one corner of the temple court, the left tower of the second pylon being further to our right, while the lower building at our feet is the "birth house." The low masonry building beyond the "birth house" is a gate built by the Emperor Hadrian. Forming our horizon beyond the dam rise the western cliffs, while behind us is the upper river, a long stretch of 217 miles to the second cataract.

We shall stop at but three points between the two cataracts, but these are such as will give us a very fair impression of the country of lower Nubia. The first stop will be at Kalabsheh, which you will find on Map 3 a short distance south of Philæ. The red lines there show that we are to be looking eastward.

Position 92. The Nubian temple of Kalabsheh, built in the days of the Roman Emperor Augustus (view east)
We have now left the cataract thirty-one miles below us, and, as you know, we stand on the west side

[^103]of the river looking nearly eastward across the temple of the ancient town of Talmis, now called Kalabsheh (Map 3). This is Nubia, and the people about us speak the Nubian tongue. As Egyptian civilization gradually spread in the country the Pharaohs built temples here after the Egyptian style, and it is incredible how a country of such scanty resources in agriculture could have supported so many enterprises of this sort. For such temples are numerous here, and although not so imposing as those we have seen in Egypt, they are nevertheless an impressive evidence of Egyptian domination in the Nubian country. The sanctuary before us was built in the days of the Roman Emperor Augustus, and is not of great historical interest; but there was a temple erected here by Amenophis II of the 18th Dynasty in the 15 th century B. C., which this later temple has replaced. It fronts the river, as you observe, and we view it from the rear on the high ground of the sandstone bluffs. It stands in a double enclosure, the inner wall of which joins the first pylon, forming a court behind the pylon. The front part of the building thus enclosed is wider and higher than the rear; and in the larger (from here the further) section, is the hypostyle hall, of which you see the roof has now fallen in. In this end of the smaller section is the Holy of Holies. In a chamber on the right of this portion of the building you observe the upper steps of a stairway leading to the roof, while at its other end in perfect preservation and very prominent from here is a double stairway leading from the lower roof of the chambers in the rear, to the higher roof of the hypostyle hall before them.

Position 92. Map 3.

The reliefs and decorations of this late temple were never finished, and its inscriptions are of slight historical importance, but it is the most picturesque temple in Nubia, with the exception of Abu Simbel, which we shall later visit. With the rough brick huts of the Nubian village grouped closely about it, the background of palms fringing the gleaming river, an idle sail flapping lazily in the light breeze, and the sandstone bluffs behind all, it makes a scene pregnant with those melancholy but delightful reveries, which only such a ruin in the far East can beget.

A hundred miles above here are the ruins of Kasr Ibrim, an ancient fortress which has played no small part in the history of Nubia. Thither we now go, and its elevated position will give us an excellent idea of this region. Red lines numbered 93 on Map 3 show that we shall be looking north.

## Position 93. Kasr Ibrim (the Fort of Ibrim) and a Nile vista to the morth-mortheast in Lower Nubia

There is the reach of river up which we have come. We are stationed on a lofty fortified rock on the east bank known as the Kasr Ibrim, and we look down river, which flows at this point about northeastward. We have now covered nearly two-thirds of our journey to the second cataract, the first being behind that northern horizon some 135 miles away. From this fine elevation we obtain an excellent and correct impression of the land of Nubia. The river winds through the sandstone table-land, with the merest narrow fringe of vegetation demarking it from the desert behind on either hand, and that scanty margin of cultivable

[^104]land is Nubia, so far as habitable territory is concerned. Wild and hostile tribes have, to be sure, inhabited the desert on either side, particularly the east side, from time immemorial, but the settled towns have depended solely upon these narrow shores for their sustenance. Way back in the days of Abraham, in the 12 th Dynasty, nearly 2000 years before Christ, the Pharaohs made conquest of this territory between the two cataracts, which we are now traversing, thus adding over 200 miles of Nile valley to their kingdom. With the rise of the 18 th Dynasty, about 1580 B. C., the conquest was gradually pushed further south, until the fourth cataract was made the frontier (Map 3). Thus the bulk of this cataract region, upon which we have entered, became a dependency of Egypt under an Egyptian viceroy, and so remained for some 800 years, until, in the 8 th century B. C., it regained its independence, made an ephemeral conquest of Egypt, and after the dissipation of such dreams, maintained itself as a separate kingdom far down into the Christian centuries. Its attempts at aggression here in lower Nubia were beaten back by the Romans, who, as well as the Ptolemies, held their southern frontier at Hierasykaminos, some sixty-five miles below us, behind yonder horizon (Map 3). Now and again, however, they even reached this fortress in which we stand. At this place, therefore, we are crossing the extremest limits of the vast Roman empire, the other end of which was lost in the forests of the northern British isles.

The Nubians did eventually thrust the Romans out of this territory, however, and even altogether out of Nubia, and having been Christianized from the 4 th century on, continued as a Christian power until the con-
quest of the Moslems in 640 A. D., when Mohammedanism gradually gained the upper hand. You remember the New Testament story of the Ethiopian eunuch and Queen Candace. A whole series of Christian queens of that name are known in this region south of us. In 1173 A. D., Shems ed-Din, brother of the great Saladin, the conqueror of the crusaders, occupied this fortress, and in 1811 the Mamlukes, fleeing from death at the hands of Mohammed Ali in the very citadel of Cairo, which Saladin first built, took refuge in this stronghold. Dilapidated and crudely built as it seems to be, this castle is an important historical landmark. The precipitous rock upon which it stands early drew the attention of the Egyptians, looking for points easily defended, and you see the traces of their occupation in the stone masonry of a temple at the other end of these ruins. A Christian church once met in these chambers, and it was plundered by Shems ed-Din in 1173. Finally the last transition took place, and a mosque of Islam occupied part of these ruinous halls. We thus have before us the material remains of the three successive religions of Egypt : the old native religion of the Pharaohs, with its many gods; then Christianity; and finally Islam. As the refuge of the Mamlukes at the rise of Mohammed Ali, it is also a memorial of the new Egypt, which has recovered Nubia, save for the interval of independence won by the Nubian tribes under their fanatical leader, Mohammed Ahmed, who called himself the "Mahdi," (the "guided"), as it was believed that he was the object of especial divine guidance and illumination. Of this fatal war, which cost England so dearly, we shall see more as we proceed.

[^105]We next visit one of the greatest monuments of the old Egypt, Abu Simbel. This unique temple is but a short distance south from our present standpoint on the west bank of the Nile. The red lines numbered 94 on Map 3 show that we shall look northwest. This position is given also on the detailed plan of this temple, Plan 19.

## Position 94. The grotto temple of Abu Simbel, seen (northwest) from a boat on the Nile

Who will ever forget the first impression of these colossal figures looking out like impassive gods upon the river which they dominate! When modern travelers rediscovered Abu Simbel, the descriptions of its glory which reached Europe were considered wild exaggerations; but the reports of Champollion in his letters left no room for doubt that here was one of the marvelous creations of the Egyptian architect, surpassing anything of the kind elsewhere known. We have seen how the cliffs in this Nubian country approach often to the very water's edge, leaving the architect no vantage ground for his temples. With what triumphant skill and consummate art has he here overcome this difficulty, by hewing his temple out of the solid rock! Reduced by perspective and seen through the rigging of this feluka, the temple does not here produce the impression of size, of which it is capable from another point of view. We are here in a small boat out upon the river 174 miles above the first cataract, and as the temple faces exactly east, we look north of west against the face of the western cliffs (Map 3, Plan 19). That front is 119 feet wide and over 100 feet high. It is crowned by a cornice of sacred apes, and a niche in the centre above the door
contains a figure of the god Horus, with the hawk's head. The four gigantic colossi which adorn the façade are each 65 feet in height, that is, higher than any of the standing colossi which we have seen, and they, as well as the whole front and the interior chambers, were hewn from the mountain as they stand. It was wrought by Ramses II, the author of the most colossal works in Egypt. The statues all represent himself, and, as we shall see, are excellent portraits. Beside them are smaller figures of various members of his family. At the extreme left, or south, is his daughter, Nebet-towe, between the feet of the southernmost colossus an unknown princess, while next her to the right is another daughter, named Bint-Anath. The colossus at the left of the door has, unfortunately, fallen, and the upper portions lie in fragments at its feet. Beside this colossus also are royal ladies of Ramses's family: on the left of the feet, his mother, Tuye, and to the right Nofretere, his wife.
These statues possess real artistic value as portraits, as we can see if we climb up and stand at the left (south) end of the temple front, and look northward at the two on the north (right) of the door. This next standpoint and our field of vision from it are given by the lines numbered 95 on Plan 19.

Position 95. The sixty-five-foot portrait statues of Ramses II, before the rock-hewn temple of Abu Simbel

Our sole purpose in climbing up here is to study and appreciate these portrait statues of Ramses II. We are now standing just south of the southernmost of the four colossi, and with the river on our right and the cliffs on our left, we look northward,

[^106]you remember, at the two figures on the north of the door. We can see here just before us the fragments of the upper portion of the first statue on the south of the door, separated from the other two before us by an interval giving access to the door itself. How puny appears the figure of that tall native compared with the gigantic form of the Pharaoh! He is not longer than the beard of the nearer figure. The Pharaoh sits in the ceremonious posture demanded of the divine ruler of the two Egypts, with hands reposing on his knees. He wears the tall double crown symbolic of his double realm of Upper and Lower Egypt. The crown rests upon a headdress of plaited linen, which hangs down behind the ears and falls upon the shoulders to a point as low as the tip of the beard. This beard is artificial, and was ceremonial and symbolic. Osiris had worn such a beard when he ruled among men. It was fastened on by straps which passed up behind the ears, and if you look closely you can discern the strap following the jaw of the nearer head up to the ear. Over the forehead is the sacred uræus serpent, the symbol of the goddess of Lower Egypt, who is thus the Pharaoh's constant companion and guardian divinity. On the breast under the beard and suspended from the king's neck is a ring bearing his name in hieroglyphics, and here on the right we also read the words: "Beloved of Amon, Usermare-Setepnere," the latter part being the prenomen of Ramses II. From the waist up the king's body is bare, but he wears about the loins a short kilt, a royal garment of enormous antiquity, which is, however, so scanty that it reaches not even to the knees. You can see its folds or plaits on this nearer leg below the forearm. Below it the legs are bare. You have

Position 95. Map 3. Plan 19.
seen the same costume, omitting the double crown, worn by King Khafre, in the Cairo Museum (Position 10). That masonry propping under the right arm is ancient, and was done by one of Ramses's successors.

You notice that the ears are set much too high. This was a device of the sculptor, frequently found in heads which are to occupy a position much higher than the observer, and yout will find that this false position is not so evident if you look at these two figures again from the river, as we did at first (Position 94). Otherwise the heads are beautifully wrought, and the expression of the face is one of kindness and benevolence, combined with that impressive calm and a subtle touch of oriental indolence mingled with imperturbability, which in both ancient and modern minds are associated with royalty in the East. Can we not easily understand how the Nubians worshiped not merely the great gods of Egypt besides their own, but also the living Pharaoh, as we look at these giant forms, which for over 3,000 years have directed the same impassive gaze over the swift-flowing river toward the rising sun? It was such works as these that made their author for generations the type of the ideai Pharaoh, so that his successors prayed the gods to grant them a reign like his.

But are these colossal sculptured figures really portraits? If you will recall the face of this king's father, Sethos I, as you saw him in his coffin in the Cairo Museum (Position 12) I think you will never question the family resemblance for a moment. Ramses II's body is also preserved in the same museum, and although these statues represent the king in his prime, while the body of the old hero was nearly, if not quite, a hundred years old when life left it, we find here,
after allowance for the difference in age, the same aquiline nose and the strong chin, which are unmistakable features of the great king. They are found in all his statues, especially the most beautiful of all, a magnificent black granite figure of him in the museum of Turin. What is here remarkable is the skill of the sculptor in working thus faithfully upon features of such colossal dimensions. In order to find out whether he was producing a faithful portrait and to gain an idea of the whole face as his work progressed, he must have gone out upon the river at short intervals and viewed these giant features from a distance. Think of working upon a nose, which from the tip to the eyebrows above was as tall as the sculptor himself! What modern sculptor possesses the hardihood to attempt a faithful portrait of this size in stone?

Now we must climb up those slippery sands, which you see drifting down the cliff north of the temple, and from there we shall look towards our present standpoint, that is, southward across the entire façade of the temple. See the lines numbered 96 on Plan 19.

## Position 96. Looking up the river across the front of the Abu Simbel temple, from the sand drift at the north

No adequate impression of this gigantic temple can be obtained from any one point of view; we must view it from several different standpoints in succession before it is possible to get from it what it is capable of giving us; for as we move from point to point its beauty and its grandeur gradually fill us with a wonder and an admiration which are not easily put into words. It is unique; no other building conveys just
such an impression. The grand old times which produced it are not so familiar to us as the history of Rome; we are not overwhe!med by a rush of familiar memories here, as when we stand beneath the shadow of the Coliseum. The age that brought forth this noble monument lies back of the great drama of Europe; it belongs to the prelude, without which the subsequent scenes of European history could not have been enacted. The chisel that wrought this colossal work left an inheritance of technical conquest, which brought to the architects of Europe an unconscious superiority over mere material difficulties, insuring fancy and imagination, untrammeled liberty to revel in beautiful conceptions, which might then be embodied in stone with a fleetness and a confident facility begotten and born of the very fingers that shaped these mighty statues before us. Viewed in their proper light, such works as these should arouse in us a feeling of the profoundest gratitude to the ancient people who developed the arts inherited by later Europe, and make of Egypt not merely the name of a vanished people, but the synonym for a debt which we can never pay.

We stand here on the sand, which sifts in continually on the north side from the desert behind the cliffs, and threatens to engulf the temple. It has been several times cleared away, and can be kept out only by the closest vigilance. We look southward across the temple front with the river on our left and the desert on the right (Plan 19). This point shows us better than any other, the court before the entrance. The face of the cliff has been excavated for some distance in order to obtain the necessary depth for the great statues. All that great excavation of the rock, a hundred feet high, was done for the most part
with bronze chisels. This court is enclosed by a low balustrade running along in front of the statues and parallel with the façade of the temple. From here you can see the other end of this balustrade just beyond the fragments of the fallen colossus, toward the outer edge of the further side of the excavation. It was adorned with small statues of the king, and with figures of the sacred hawk, of which you may see one that has been removed to the base of the fallen colossus. The legs of the further two colossi bear a number of Phœnician, Greek and Carian inscriptions, one of which, on the legs of the fallen colossus, is of great interest, being among the oldest known Greek inscriptions. It was placed there by soldiers of King Psamtik, probably the second, of the 26th Dynasty, early in the 6th century B. C. Here, then, is a monument from the beginnings of Greek influence in Egypt, which culminated in a series of Greek kings of Egypt, the Ptolemies, whose monuments we have so often seen. The northernmost of the four colossi is hidden behind the projecting rock on our right, but you can here compare the next one very well with the southernmost at the other end. You see in it again the characteristic features of Ramses II, as we found them in the two figures at this end. Above, the statues is a horizontal line of large hieroglyphics, just below the cornice. It contains in duplicate the pompous titulary of Ramses II, which begins in the middle and reads both ways. The hollow of the cornice above has largely fallen down. It bears a row of cartouches, or royal ovals, containing the name of the king and enclosed within the folds of the sacred uræus serpent. At the top is the line of sacred dog-headed apes crowning the whole.

These animals were especially connected with sunworship, and hence we find them here facing the rising sun, with forepaws raised in adoration.

Beyond the further projection of the rock is disclosed a long reach of the river, up which we look toward the second cataract, forty miles away. In its original bright colors, framed in the sombre gray and brown of the sandstone cliffs, with the blue river beyond, how striking the effect of this temple front must have been! But we can spend no more time on the exterior; for we have still to view the halls within. We shall stand just within the entrance down between the statues, and look back to the inner sanctuary of the temple chiseled into the heart of the cliff. See the lines numbered 97 on Plan 19.

Position 9\%. Interior of the rock-hewn temple of Abu Simbel, showing the Holy of Holies, with the statues of the gods in the rear
As you know from the plan (No. 19), we are standing in the entrance door looking westward directly down the main axis of the temple. The river and the rising sun are directly behind us, on the right is the whole length of the valley up which we have come, and the second cataract is forty miles away on the left. On our extreme right and left, and almost close enough to touch them, are the door-posts of the great entrance door, carved with the name of Ramses II, as you see most clearly on the left. Beyond the door the great vestibule hall expands before us. If the building were one of masonry, this would be a court surrounded by pillars of Osiris. You will recollect that such a court precedes the hypostyle in the Ramesseum at Thebes, built by this same king. But

[^107]a masonry court was here an impossibility, and the architect has converted it into a vestibule hall. It is $5 \pm$ feet by 58 feet, and the eight massive Osiris-pillars which support the roof are 30 feet high. They represent Ramses II in the form of Osiris, and you will recognize the features of the king especially in the next to the last on the right. They have suffered sadly from the ravages of time, but they still show clearly the skilful execution of the sculptor. The walls of this hall are decorated with relief scenes depicting the king's warlike achievements, especially the great battle at Kadesh, which we found first at Luxor and then at the Ramesseum. The north wall behind these pillars on the right is occupied for a large portion of its length by the scenes from this battle. The original colors are still fresh and bright. In the two further corners are two doors leading to eight chambers for the temple implements and supplies; of these chambers three are on the left, and five on the right, as you will see by reference to the plan (No. 19).

Looking through the door opposite us we see the hypostyle hall, the four pillars of which are out of range, two on either side of the door. It is 36 feet wide by 25 feet deep, and you observe in the middle one of the hawks, such as we saw outside on the base of the fallen colossus. The door behind the hawk leads to a transverse ante-chamber (Chamber III on Plan 19) of little depth, beyond which is the door of the Holy of Holies. Through that last door, then, we look into the holy place itself and discern in the dim light the distant figures of two of the four gods who occupy it. These are Amon-Re, the state god (on the left) and Ramses II himself (on the right). The two others seated there are Ptah of Memphis on the left, and Re-Har-
machis of Heliopolis on the right; but they are cut off from our view by the door-posts on either side. Thus the gods of the three great religious centres of Egypt: Thebes, Heliopolis and Memphis, are here sacred in this temple in Nubia, and with them is associated the Pharaoh himself, the lord of Nubia. He whom we have seen in those colossal forms outside the temple front, was therefore one of the great gods who were worshiped within it. In front of these divine figures and behind the hawk which partially conceals it, you discern a small altar, for the temple service. You will find its position marked upon the plan in the "Sanctuary." The wall behind the statues of the gods is the rearmost wall of the temple. We can therefore measure with the eye the entire depth of these successive halls; from the threshold on which we stand to that distant rear wall it is 180 feet. And even this vast sanctuary, hewn out of the solid rock, was not enough to satisfy the zeal of the great builder. For but a few huradred paces to the north of us there is another temple to the goddess Hathor, similarly hewn out of the cliff ; but it is much smaller than this, and is not so skilfully designed, so that we shall not take the time to visit it, but shall pass on to the second cataract.

Find the lines numbered 98 on Map 3, a short distance south of Abu Simbel. There we shall be looking northeast.

Position 98. Second Caiaract of the Nile, from the southu'est, the first obstruction to navigation for a thousand miles
We have now reached the termination of the journey by the river; from this point which by water is
nearly a thousand miles from Alexandria and the sea, we shall proceed by rail. Our point of view is on the west beside an elevated rock known as Abusir (Map 3). We look northeastward down the rocky gorge, over the wild prospect of the cataract. It is now March, and the waters have been falling for four or five months; but in the time of the inundation, it is an impressive sight to see the river rushing over these stubborn rocks which for ages have resisted the erosion of the stream. They are chiefly granite, with outcroppings of other similar rocks, which break up the stream into numerous tortuous channels, or, when submerged, harass the waters into a wild and fearful tumult of successive leaps and plunges, churning the flood for miles into a boiling, seething cauldron, flecked with yellow foam, which gleams in striking contrast with the black rocks that form the obstruction.

This cataract was the frontier of the Middle Kingdom, whose kings first made conquest of lower Nubia; although to maintain it they built a series of forts in the valley or on the islands in the stream for thirty miles above this point. These forts, built in the days of Abraham, are still standing in a fair state of preservation. The tribes which they were built to keep in subjection 4,000 years ago, had not in the year of grace 1883 yet lost their aggressiveness; for at that time, under their skilful leader, the Mahdi, they regained their independence and eventually drove back the British to this cataract. The frontier post of the English then became Wadi Halfa, a town almost in sight from here, about five miles down stream directly on our present line of sight on
the other side of the river. That is, the frontier became essentially the same as that of the Pharaohs in the days of Abraham, so often and so long has civilization been thrown back from permanent conquest of this valley. Here it remained until the British in 1896-7 pushed a railway from Wadi Halfa out into the desert here on our right, having as their objective the town of Abu Hammad, thus cutting off the enormous bend of the river, which is behind us (see Map 3 ). Trace that bend on the map to the fourth cataract and you will have the extent of Egyptian domination of Nubia in ancient times. There are some scattered Egyptian monuments along that great bend from the fourth cataract down to the point where we now stand, but they are not to be compared in magnitude and splendor with those which we have already seen. Hence we shall leave the river at Wadi Halfa, just below us here, and following the railway through the desert on our right to Abu Hammad, we shall go on to its terminus in Khartûm.

Omdurman and Khartûm you will find at the lower extremity of Map 3. These two cities are given on a larger scale also on Map 20. On the latter map you will find our next standpoint indicated by the lines numbered 99 . We shall look northeast.

Position 99. The tomb of the Mahdi at Omdurman -Kerreri Hills at left, scene of Kitchener's victory-Sudan

This is perhaps the most significant monument which we could find here at the terminus of the long 576 -mile journey from Wadi Halfa. If you will look at the map (No. 20), you will find that Omdurman
is on the left bank of the White Nile, just where the Blue Nile flows into it. As we stand now both rivers are here on our right, but quite out of range. We face northeast, that is, down stream, and Khartûm is also here on our right, but out of range on the south bank of the Blue Nile just above its junction with the White Nile. When Gordon entered Khartum in February, 1884, in the endeavor to save the Sudan from the Mahdi, he rode to his death, and the small body of troops sent for his relief, which nearly a year later succeeded in forcing their way into Khartûm under General Sir Charles Wilson, found that the town had fallen but two days before, and that Gordon had perished. It was not until the year 1896 that, beginning the construction of the railway through the desert from Wadi Halfa, the Egyptians, under British officers and with a nucleus of English regulars, advanced for the recovery of the Sudan and the upper river. Enjoying constant and rapid railway connection with his base at Wadi Halfa, Sir Herbert Kitchener pushed the desert railway rapidly forward, and on September 2, 1898, out on the slopes of the Kerreri hills, which you see on the left, he fought a decisive battle with the dervishes, who, advancing recklessly with an army of 35,000 men, were met by a steady fire from modern weapons, which killed and wounded over 25,000 , while the balance were half of them taken prisoners. The bones of the fallen dervishes still whiten the plain out by those hills. Kitchener entered the town on the afternoon of the same day, when the native Egyptian troops, although themselves Mohammedans, blew up the tomb before us, and thus prevented it from becoming a shrine to which the fanatical dervishes were beginning to make annual pilgrimages;
for such pilgrimages might have resulted in religious uprisings like that of the once potent Mahdi.

The tomb is, you see, a low, roofless building, with arched windows, surrounded by a court with an arched door on the right. The low roof on the right beyond this court is the Mahdi's house, over which you see two handball courts of the British officers of the garrison. The entire town, which the Mahdi had built as his capital, consists of crude one-story houses, built of sun-dried brick. Had we stood where we now stand before Kitchener's capture of the place our lives would have not been worth a turn of the hand, but now it is as safe as the streets, of your own town, and the Khalipha, the Mahdi's successor, who might have made further trouble, was overtaken in his flight, and fell with the few followers who still clung to him. The place under the Mahdists was really only a large and permanent military camp, which, after the Mahdi's death in 1885, was for fourteen years the residence of his successor, Abdullahi Taishi, often called the Khalipha, which means representative or successor. This bloodthirsty fanatic made the place the scene of the most horrible cruelties. The Europeans whom he held as captives were cruelly imprisoned or slain, except when the Khalipha had need of their services. Thus the German, Neufeld, was forced to build parts of this tomb of the Mahdi, which the native workmen were incapable of executing, and the Austrian, Slatin, now Slatin Pacha, was a slave and body-servant of the tyrant. Both these men escaped, and the flight of the latter, which he narrates in his book, "Fire and Sword in the Sudan," is one of the most remarkable feats of modern times. The natives also were treated by the Khalipha with monstrous

[^108]cruelty, and tortured and slain at the slightest provocation. The place of execution was the market on our left, but not within our present field of vision, and near there is a spot now called the "Tomb of the Martyrs," a pit into which the heads and limbs of the victims were cast.

The Khalipha was able to maintain himself, in spite of his cruelty and tyranny, by the support of his tribe, the Baggara, who were powerful and numerous enough to hold the decimated tribes of the Sudan in subjection, and save the Khalipha from an otherwise inevitable uprising, which would have cost him both his rule and his life. He transferred the whole of the Baggara to this town and built a strong quarter for them, enclosed by a heavy wall, of which you can see one side from here. It is that dark line of wall running obliquely across our field of vision, from the handball courts on the right, toward the Kerreri hills on the left. There the Khalipha took care so to favor the Baggara, that they should always remain faithful to him. Thus when the neglect of agriculture, caused by the existing misgovernment and the annihilation of whole tribes, brought on a frightful famine, the Khalipha delivered grain to the Baggara from his own magazines at the abnormal price of six dollars an arteb, although the market price was sixty dollars here at Onidurman, and at Kassala it even reached two hundred and forty dollars for a time. At that time people flocked to this place by thousands, and died here in myriads like flies; for all the lands in the vicinity had been confiscated by the Khalipha and given to the Baggara, so that there was nothing for the newcomers from other tribes. Father Ohrwalder, an Austrian priest, who had been seized by the Mahdi
as a prisoner, while engaged in missionary work at the outbreak of the revolt, estimates, as he said, at that time, that "upwards of three-fourths of the population of the Sudan has been destroyed by war, famine and disease." But in spite of misrule, this town grew until it now has accommodation for at least 100,000 people. Its population is at present an indescribable mixture of the lowest African and Levantine elements, and the market which was once the scene of such atrocious barbarities is now an animated scene of traffic in the products of the Sudan. See Map 20 for our last standpoint.

Position 100. Governors palace and an armored steamer leaving Khartum for Fashoda and the Blue Nile

There is no point at the new Egyptian capital of the Sudan, where a better idea of the life and character of the place could be obtained than just where we are now standing. If you will look carefully at the little map (No. 20), you will see that we have taken our stand on the north side of the Blue Nile, near the Halfaya railway station, which is the terminus of the railroad from Wadi Halfa, 576 miles away. We look a little south of westward across the Blue Nile, and the city of Khartum, on the opposite side of the river. When the place fell and Gordon was slain, it was destroyed by the Mahdi, who built his capital at Omdurman, which we have already seen. From here Omdurman is out of range on our right. That long, low island, which is cut in two by the smokestack of the further steamer, lies close to the upper end of the island of Tuti, opposite the lower end of which lies Omdurman, on the other side of the White Nile, where
the two rivers join to form the united stream, the Nile which we have so long followed. The last is now out of sight around a bend of the Blue Nile to the right; while the White Nile is flowing toward our right yonder behind the buildings and palms of Khartûm, and if we were high enough we could plainly see it, as it hurries to join the Blue Nile by the island of Tuti, of which you can almost see the upper end beyond the second steamer. If you will follow the topography on the map (No. 20) the whole situation will be quite clear. The present Khartûm which we see on the other shore is therefore a new town, the work of the British since the recovery of the place in 1898 . The first town was founded by Mohammed Ali in 1823, and soon became a flourishing trade centre for the products of the Sudan. Its name, Khartûm, meaning "elephant's trunk," is derived from the curved point of land between the two Niles at their junction, which was thought to resemble an elephant's trunk. After the destruction by the followers of the Mahdi in 1885, the town lay in ruins for nearly fourteen years, and the present restoration by the British is a transformation, for which no praise is too high.

At the left of this first smokestack is the palace, in which the governor of the Sudan lives. It is built on the spot where, at the door of his house, Gordon fell. The smokestack hides a government building, in which are the administrative offices, while on the left of the palace are the government magazines and workshops. Quite out of range on the left is the Gordon Memorial College, where native youths are educated for official positions. There is an excellent hospital, with a laboratory for the investigation of the many diseases peculiar to the Sudan, a post-office, two banks, shops controlled
by the government, cleanly and hygienic barracks for British and native troops, and a good hotel. These are all close to the river here, and the native town is growing up behind them further south. From here are now going out the influences that must redeem the Sudan after the awful visitation of some twenty years of Mahdist misrule. The new town is connected with the railway terminus on this side by a steam ferry, and you see the winding wake trailing in a curve from the further steamer, which is one of the ferry boats just landing her passengers from the town.

This boat nearest us is taking on black troops for transport to Fashoda, 510 miles further up the White Nile. It will presently steam down this short stretch of the Blue Nile before us, and then turn southward into the White Nile below the islands. This service involves danger, and the steamer is armored for its work. Under the awning of the upper deck, disclosed by the flapping of this flag on the bow, you see a Maxim gun, peeping out from under its canvas cover. The forward windows of the pilot house show iron shutters, which may be closed in time of danger, leaving only a slit through which not only to see, but also to thrust the deadly magazine rifle. Out in the stream on the extreme left are two more military transports, in tow by a government steamer; these have already left for the same destination. These boats, then, though prepared for war, are messengers of civilization, penetrating to the heart of Africa, and gradually bringing the vast resources of the dark continent into the world of modern commerce and industry.

Possibly the adventurous nobles of Elephantine, whose tombs we visited there, had already penetrated in their trading expeditions, to this junction of the two
rivers, but the country above it has always lain in complete darkness. The remotest monuments of ancient Egypt are over 400 miles below us here, and the Pharaohs never dominated the country on either side of this Blue Nile.

And here we take final leave of this remarkable river and the valley which it wrought, as a cradle of early civilization. Civilization has always moved up river valleys, and we have together journeyed in the footprints of early man as he passed up this, the most interesting valley, in the orient, where any remains of early man are found. We have seen his traces gradually disappear, until at this point we stand on the verge of the great uncivilized heart of Africa, from which the river issues. Equally primitive must once have been the life of the men of the lower Nile, and as we have moved up the river we have thus followed the stream of civilization from its later and more developed phases, to its modern primitive survivals in the Sudan. Not that the Sudan is the source of Egyptian civilization, but it is to-day in much the same material condition in which the trading nobles of Elephantine must have found it nearly 5,000 years ago.

## PUBLISHERS' NOTE

If for any reason it seems impracticable to take this entire tour of Egypt, an excellent plan is to take-
(a) The first 51 positions, going through Lower Egypt, visiting Cairo, the Pyramids and all points intermediate to Thebes, gaining at Thebes a general knowledge of the great Theban plain, and making a detailed study of one of the Theban temples-the Temple of Luxor. (Nos. 1-51 inclusive.)
(b) The first 27 positions, seeing Lower Egypt and Cairo and making a detailed study of the Pyramids. (Nos. 1-27 inclusive.)
(c) The 33 positions at Thebes, seeing all the most magnificent temple remains of that famous city. (Nos. 47-79 inclusive.)
Still smaller parts of the entire tour that may be taken by themselves are-
(d) The 12 positions about and within the Pyramids. (Nos. 16-27 inclusive.)
(e) The 15 positions in Lower Egypt and in and about the streets of Cairo. (Nos. 1-15 inclusive.)
(f) The 12 positions in and around the Temple of Karnak. (Nos. $52-63$ inclusive.)
(g) The 8 positions at Assuan, Philæ, and around the First Cataract of the Nile. (Nos. $84-91$ inclusive.)
(h) The 4 positions about the rock-hewn Temple of Abu Simbel. (Nos. 94-97 inclusive.)
It will be found much more enjoyable and more profitable to take some such definite part of the tour and follow it systematically, rather than to make a selection of unconnected positions all over the country.

In any case, the advantage of having Professor Breasted's book, with the patent maps, cannot be too strongly urged.

## INDEX TO STEREOGRAPHS AND BOOK*

Aahhotep, 286.
Abdullahi Taishi, 346.
Abraham, 96, 98, 110, 180, 184, 186, 299, 331, 343, 344.
Absha, 180.
Abu Hammed, 43, 52, 344.
Abu Roash, 25, 123.
Abu Simbel (Plan 19), 94, 95, 96, 97, 52, 88, 330, 333, 334, 337, 340, 342.
Abusir, 139, 343.
Abydos, 22, 51, 187, 197, 198, 227.
Temple of Sethos I, 43, 187. Hypostyle, 44, 191. Relief, 45, 194.
Abyssinia, 18, 120, 169.
Aegean Islands, $25,27$.
Africa, 17, 49, 122.
Agriculture, 20.
Threshing, 37, 169.
Winnowing, 38, 171.
Ahhotep, Queen, 97.
Ahmesnofertari, Queen, 286.
Ahmosis, 27, 97.
Grandson of, 29.
Albert Nyanza, 18.
Alexander the Gireat, 38, 45, 53, 54. 110.219.

Alexandria, 1, 38, 39, 40, 42, 45, 51, $52,53,54,55,56,58,322,343$.
Museum, 39, 54.
Pompey's Pillar, 1, 53, 54, 55.
Allah, 78, 212.
Amalric, 58.
Amarna Letters, 31, 32.
Amenemhet I, 154.
II, 154, 281.
III, 26, 143, 162, 163.
Amenemhets, 26, 204.
Amenmose, 179.
Amenophis 1, 267, 286.
II. 241, $280,329$.

III, $30,209,210,212,213,214$, 219, 232, 234, 237, 239, 251, $252,261,262,280,282,317$. Stela of, 14, 99, 100.
IV, $30,31,100,227$.
Amon, 30, 36, 99, 100, 110, 190, 191, 204, 209, 212, 217, 220, 225, $228,240,241,245,249,250$, 262, 288, 335.
Amonite Priests, 31, 34, 220.
Amosis, 286.
Amr ibn el-As, 40, 58, 69.
Anuket, 320.
Anubis 266.
Aphrodite, 198.

Apollos, 93.
Arabia, 17, 57, 110.
Arabian Desert, 119, 184, 221.
Arabic Language, 41.
Arabi Pacha, 42.
Arabs, 21, 43, 131, 156, 172, 312.
Architecture. Saracen, 75.
Aristotle, $17 \overline{0}$.
Arsinoe, 174.
Art, 48.
Saracen, 73, 77, 85
Asliraf, Sultan El, 74.
Asia, 17, 27, 29, 30, 32, 57, 204, 245, 286.
Asia Minor, 31, 32, 297.
Assiut, 42, 25, 51, 121, 181, 182, 184, 186, 197, 227, 278, 300 , 326.

Tombs, 41, 181, 182, 203, 265.
Assuan, 81, 19, 20, $52,217,308$, 309, 310, 314, 315, 318, 321, 328.

Dam, 91, 326.
Ciranite Quarry, 87, 315, 316.
Tomb of Harkhuf, 85, 310.
Ashurbanipal, 36, 45.
Assyria, 35, 36, 37, 110, 226.
Assyrian Invasion, 45, 205, 210.
Assyrians, 36, 43, 237.
Atbara, 18.
Atlantic, 57, 119, 173.
Aton, 30, 227.
Augustus, 179, 198, 200, 205, 326, 328, 329.
Avaris in the Delta, 27.

## B

Babylon, 17, 58, 278.
Babylonia, 30, 38.
Bacchylides, 175.
Baedeker, Herr Karl, 16.
Bagdad, $40,69$.
Baggara, 347.
Bahri, Sultans, 73.
Bahr Yusuf, 163.
Bairam, 66, 79.
Belzoni, 123.
Barbarossa, 179.
Barkuk, Sultan, 73.
Beduin, 24, 31, 32, 94.
Beirut (Berytus), 32.
Benihasan, 51, 227.
Tombs, 40, 176, 179, 265.
Berlin Museum, 154, 310.
Bey, Amin, 65.
Rey, Emil Brugsch, 285.
Libars, Sultan, 80.

[^109]Bible, 156.
Translations of, 41.
Bigeh, 321, 322, 323, 326, 328.
Bint-Anath, 334.
Bite, Land of, 312.
British Museum, 157, 284.
Browne, Sir Thomas, 115.
Brugsch, 133.
Bubastis, 35.
Bulak, 87, 104, 286.
Burded, 312.
Bursbey, Sultan, 73, 74.
Buto, 194.
Byzantine Dominion, 40.
Emperors, 46.

## C

Cæsar, 54.
Cæsar, Tiberius, 198
Cairo, 2, 3, 4, 5, 6, 7, 8, 9, 10, $11,12,13,14,15,29,40$, $41,51,55,56,57,58,59,60$, $61,62,64,67,68,71,74,76$, $78,84,90,94,97,99,102$, $109,111,119,121,122,137$, 146, 150, 158, 160, 181, 278, 304, 326.
Abdin Palace, 2, 62.
Bab el-Azab, 2, 59, 60, 65.
Bab el-Wezir Om, 3, 64, 65, 79.
Bab en-Nasr, 67.
Gezireh Palace Hotel, 2, 15, 62, 104.

Hotel Savoy, 2, 62.
Hotel Shepheard, 63.
Holy Carpet Parade, 8, 78, 79.
Mosques,
E1-Azhar, 62.
Emir Yusuf, $5,73$.
Hasanen, 67, 79.
Ibn-Tulun, 4, 70.
Kait Bey, 6, 7, 74, 76.
Mohammed Ali, 3, 64.
Rifaiyeh, 2, 4, 61, 68.
Sultan el-Ashraf, 5, 74.
Sultan Barkuk, 5, 73.
Sultan Bursbey, E, 73.
Sultan Hasan, 2, 60, 61, 62, $76,117$.
Museum, 2, 33, 56, 63, 86.
Body of Sethos I, 12, 94, 246. 283, 336.
Jewelry of the Pharaohs, 13, 97.

Shekh El-Beled, 11, 90.
Statue of King Khafre, 10, 87, 92, 93, 138, $260,336$.
Stela of Amenopbis III, 14, 99, 251.
Nile Bridge, 15, 102.
"Old Cairo," 58.
Place Rumelab, 2, 60, 65, 78.
Saladin's Citadel, 3, 56, 59, 64, $65,67,68,70,73,78,86,332$.
Tomb of Tarabai e6b-Sherif, 66. Caligula, 200.
Cambyses, 38, 45.
Candace, Queen, 332.

Carians, 37.
Carmel, 32.
Caviglia, 142.
Champollion, 324, 333.
Christianity, 40, 41, 46, 54, 77, 172, 175, 306, 332.
Christians, 40, 41, 77.
Chronological Table, 44.
Circassian Sultans, 73.
Cleopatra, $39,45,55,324$.
Cleopatra's Needle, 55.
Claudius, 200.
Coliseum, 338.
Constantine, 46.
Constantinople, 40, 46, 54.
Copts, 41.
Cretans, 297.
Crocodilopolis, 39, 172, $173,199$.
Crusaders, 64, 70, 75.
Cushite Kingdom, 36.

## D

Dahabiyeh, 33, 158, 159.
Damascus, 57.
Danube, 325.
Darius, 156.
Dashur, 27, 144.
David, King, 94.
Davis, Theodore M., 280.
Davison, Mr., 134.
Decadence, 34, 45.
Libyan, 35, 45.
Nubian, 36, 45.
Delta, 19, 20, 21, 23, 25, 27, 33, 34, $35,36,37,38,43,48,51$, 53 , $55,56,64,105,110,119,121$, $146,155,185,205,246,298$, 306.

Princes of the, $36,38,45$.
Denderah, 51, 197, 201, 212. 325.
Temple of Hathor, 46, 197, 292, 301, 326.
Der el-Bahri, Temple of (Plan 14), 70, 71, 206, 263, 268, 270, 271, 274, 275, 277, 284, 287, 289, 296, 316.
Diocletian, 54.
Dynasties,
1st, 22, 24, 44, 98, 195.
2d, 22, 44.
$3 \mathrm{~d}, 22,24,44,143,147, \mathrm{~J} 48$, $162,319$.
4 th, 22, 23, 24, 44, 106.
5th, 22, 24, 44, 148, 312.
6 th, $22,23,24,25,26,44,148$, 311, 316.
7 th, 25.
8 th, 25 .
9tb, 25, 182, 203.
10th, 25, 182, 203.
11 th, $25,26,44,182,203,269$, 278.

12th, 26, 27, 44, 69, 99, 121, 154, $161,162,163,173,175,176$, $180,181,183,203,204,208$, 221, 228.
13 th, $27,44$.

Dynasties-(Continzed).
18 th, $27,28,29,32,33,34,43$, 44, 99, 141, 154, 204, 207, 208, $210,221,222,223,227,230$, $232,238,239,250,283,288$, 291, 292, 293, 307, 329, 331.
$19 \mathrm{th}, 32,33,34,43,44,94,189$, $204,210,221,222,223,224$, $227,232,241,243,248,281$, 285, 286, 288.
20th, 33, 34, 44, 238, 281, 283, 286, 288, 290.
21 st, $34,35,36,45,280,284$, 287.

22d, 35, 45, 248.
25th, 228.
26 th, $37,38,45,339$.
27th, 38, 45.
28th, 38.
29th, 38.
30th, 38.
Eyyubid, 41.
P'tolemaic, 39, 53.

## E

Edfu (Plan 16), 81, 52, 190, 197, $223,291,300,301,308,309$.
Temple of Horus, 81, 82, 83, 301, 303, 306.
Egypt,
People of, 17. Origin of, 21.
Story of, 17.
Elephantine Island, 84, 86, 52, 308, $309,310,312,313,318,319$, $321,350,351$.
Nilometer at, 86, 313.
Empire, The, 27, 34, 37, 44, 163, 193, 198, 280, 299, 311.
Art, $30,90$.
Costumes, 30.
Language, 30 .
Pastimes, 30 .
Religion, 30, 31.
Political Conditions, 28, 31. Social Conditions, 29.
Eingland, 332.
F.nglish, 43.

Eos. 253.
Esarhaddon, 45.
Ethiopia, 188, 189, 205.
Ethiopian Eunuch, 332.
Kingdom, $37,228$.
Fithiopians, 36, 228.
E:truscans, 297, 320.
Eudoxus, 153.
Fuergetes I, 219, 220.
Euphrates River, 28, 29, 30, 39, 40, 145.

Valley, 17.
Eyyubids, 41,46 .

## F

Farag, Sultan, 73.
Fashoda, $348,350$.
Fatimids, $40,46,59,60,70,320$.
Fayum. 26, 27, 51, 121, 161, 162, $172,173,182,183$.

Fostat, 58.
France, 110.
French, 43, 46.

## G

Gallus, Cornelius, 45.
Geneva, 188.
Lake, 326.
Giddeh, 81.
Gizelı, 144, 147, 148, 162, 177, 188, 203.

Pyramids of, 4, 16, 22, 23, 24, 25, 27, $51,57,68,70$, $87,96,102,104,146$.
Great Pyramid, 17, 18, 19. 26, $105,108,109,111,115$, $118,120,123,125,137,139$, 147, 148, 150 .
Entrance to, :23, 128.
Interior, 24, 130.
King's Chamber, 25, 132.
Second Pyramid, 21, 27, 122, 140.

Sphinx, 17, 26, 27, 89, 108, $109,137,140,316$.
Temple, Granite, $26,137$.
Glyptothek at Munich, 93.
Gordon, General, 42, 46, 345, 348 , 349.

Gordon Memorial College, 349.
Goshen, 33, 150.
Granite Temple, 26, 137.
Greece, 23.
Greek Period, 38, 45, 53.

$$
\text { Religion, } 39 .
$$

Temples, 39 .
Greeks, $37,43,109,140,163,173$, 184, 211, 247, 309, 310.

## H

Hadrian, 253, 328.
Halfaya. 348 .
Harkhuf, 311, 312.
Harsomtous, 200.
Harun er-Rashid, 130.
Hathor, 198, 199, 302, 342.
Temple of, 46, 197, 292, 301, 326.

Hatshepsut, 28, 140, 217, 239, 240, 260.

Hawara Pyramid, 161, 183.
Hebrews, 29, 32, $33,35,51,78,94$, 98, 99, 101, 156, 157, 158, 172, 257, 267, 320.
Hebrew Occupation of Palestine, 32.
Heliopolis, 51, 58, 152, 153, 154, 155, 238, 342.
Obelisk. 31, 152, 154, 155, 238, 315.

Sacred School, 153.
Hepzefi, 183, 184.
Heracleopolis, 25, 182, 183, 186, 203.
Heracleopolitans, 25, 203.
Herodotus, 109, 111, 322.
Hierasykaminos, 331.
Hir-Hor, 34.

History, Periods of,
Predynastic, 21, 44.
Old Kingdom, 22, 44.
Middle Kingdom, 25, 44.
The Empire, 27, 44.
The Decadence, 24, 45.
Libyan, 35, 45.
Nubian, 36, 45.
Restoration, 37, 45.
Persian, 38, 45.
Greek, 38, 45.
Roman, 39, 45.
Moslem, 40, 46.
Turkish, 42.
Hittites, 31, 32, 246.
Holy Carpet Parade, 8, 78, 79.
Holmes, Oliver Wendell, 14.
Homer, 175, 202, 204.
Horus, 57, 302, $307,334$.
Temple of, 81, 82, 83, 301, 303, 306.
Hyksos, 27, 28, 44, 97, 204, 299.

## 1

Ibn Tulun, 40, 68, 69.
Ikhernofret, 188, 189.
1khnaton, 30, 31, 100, 227.
Iliad, 204.
Illahun, 34, 27.
Pyramid of, 123, 161.
Imhotep, 319.
India, 54.
Ineni, 239, 242, 280, 316.
Isesi, King, 312.
1 sis, $322,325$.
Temple of, 89, $00,91,38,197$, $321,323,326,328$.
Islam, 21, 41, 55, 77, 79, 332.
Ismail Pacha, 62, 105, 313.
Isocrates, 175.
Istacl. 33, 99, 101, 248, 252.
Itinerary, 47.

## J

Jeroboam, 35.
Terusalem, 35, 59, 77, 99, 248, 249.
Iesus, 175.
lews, 40, 77.
loseph, 153, 320.
Tosephus, 27.
Iosiah, 94.
Judah, 94.
Judea, 24.
Justinian, 325.

## K

El-Kab, 80, 52, 298, 299.
Kadesh, 32, 217, 235, 259, 341.
Kafr, 16, 106, 108, 120.
el-Kahira, 59.
Kait Bey, 74, 75.
Mosque of, 6, 7, 74, 76.
Kalabsheh. 82, 52, 328, 329.
Karnak (Map 8, Plans 11, 12), 201, $203,205,206,208,213,214$, $215,217,218,219,259,263$,

Karnak-(Continued).
269, 271, 280, 289, 293, 298, 304, 315, 342.
Temple of Amon (Plan 12), 5:, 53, 54, 55, 56, 57, 58, 59, $60,61,62,63,35,94,103$, $153,196,205,218,220,222$, 224, 226, 231, 233, 236, 239, 242, 244, 246, 248, 307.
Sacred Lake, 58, 233, 235, 239, 245.

Kasr Ibrim, 93, 52, 330.
Kassala, 347.
Keneh, 160 .
Mudir of, 285.
Kerreri Hills, 99, 344, 345.
Khafre, 107, 124, 125, 143, 336.
Statue of, 10, 87, 92, 93, 138, 260, 336.
Khalipha, 346, 347.
Khartum, 100, 18, 46, 52, 81, 344, $345,348,349$.
Khedive, 286.
Khefren, 107.
Kheops, 107.
Khnumhotep, 180, 181.
Khnum, 319, 320.
Khons, 220.
Khufu, 107, 108, 109, 111, 125, 128, $130,133,136,179,317$.
Pyramid of, see Pyramids.
Khufu-onekı, 112.
Kisweh, Procession of, 78.
Kitchener, Lord Herbert, 42, 344, 345, 346.
Koran, 58, 67, 72, 79, 85, 300.
Kum el-Aswad, 121.
Kurna Temple, 206, 275, 290, 292.
Kush (Ethiopa), 188.

## $L$

Lagus, 53.
Lane, $80,85$.
Language, Origin of, 21.
Lebanon, 24, 32.
Lepsius, 161.
Libya, 205.
Libyan Invasion, 33.
Libyans. 21, 34, 43, 45, 101, 246. 252, 293, 298.
London Obelisk, 153.
Loret, 280.
Luxor (Map 8), 47, 72, 201, 202, 203, 205, 206, 207, 218, 219, 220, 222, 227, 232, 234, 237, 251, 258, 274, 341.
Temple (Map 8, Plan 10), 48. 49, 50, 51, 207, 211, 213, 215, 235.
Obelisk, 51, 215, 217, 315.
Lycopolis, John of, 184.
M
Machiavellian Politics, 31.
Mahdi, 42, 46, 62, 343, 345, 340, 347. 348, 349.
Defeat of, 43.

Mabmal, 78, 79, 80, 81, 82.
Makere, Queen, 239, 240, 200, 268, 269, 270, 271, 272, 280, 316, (see slso Hatshepsut).
Mamlukes, $40,41,42,46,60,65,70$, 73, 74, 86, 142, 332.
el-Mamûn, Caliph, 130, 133.
Manetho, 21.
Map System, 12, 50.
Use of, 47.
Map No. 1-17, 28, 53.
No. 2-18, 24, 26, 28, 32, 36 .
No. $3-23,25,26,28,30,36,37$, 51, 55, 155, 156, 157, 176, 181, 184, 187, 197, 201, 344.
No. 4- $^{55,56,58, ~ 63, ~ 67, ~ 69, ~ 71, ~}$ $73,102,104,108,118,119$, $144,146,147,150,152$.
No. 5-25, 26, 107, 108, 109, $111,115,118,122,123,124$, 125, 128, 136, 277, 278, 298, 300, 308, 308, 328, 329, 330, 331, 333, 342, 343.
No. 6-25, $27,161,162,172$.
No. 8-201, 202, 203, 206, 207, 218, 218, 220, 251, 254, 258, 261, 263, 274, 275, 277, 278, 279, 289, 292.
No. $9-206,251,261,263,268$, 274, 275, 279, 284, 287, 288, 289, 292.
No. $17-308,310,312,318,320$, 328, 326, 327.
No. $20-344,348,349$.
Mariette, $87,94,138,142,150,189$, 302.

Masara Quarries, 30, 151.
Maspero, 142.
Mastabas, $112,113,114,177$.
of Khufu's lords, 22, 125, 126. of Zoser, 29, 147.
Mecca, 60, 76, 77, 78, 79, 80, 81, 82.
Mecca-Kaaba, 79, 81.
Mechanics, 49.
Medina, 77.
Medinet Habu, 68, 77, 78, 79, 190, 206, 263, 275, 287, 288, 289, 290, 291, 294, 295, 298.
Mediterranean, 24, 38, 52, 56, 119, 122, 279, 297.
Medum, 148, 149, 162.
Mekhu, 312.
Memnon, 253.
Memnon Statues, 47, 64, 67, 202, 206, 251, 257, 260, 261, 269, 271, 275, 276, 281.
Memphis, 23, 25, 26, 36, 51, 57, 109, 111, 119, 122, 137, 144, 146, $147,148,149,152,158,163$, 173, 174, 227, 311, 341, 342.
Cemetery, 29, 147.
Statue of Ramses 11, 28, 144.
Mena House Hotel, 108, 143.
Menes, 21, 14, 195.
Menkewre, 107.
Menmare, 193.
Mentuhoteps, 269.

Merneptah, 99, 101, 193, 251, 252, 262.

Mernere, King, 133.
Meroe, 37.
Mesopotamia, 22, 69.
Middle Kingdom, 25, 27, 28, 29, 33, 44, 51, 162, 176, 177, 181, 198, $300,313,343$.
Art, 26.
Medicine, 26.
Monarchs of, 26.
Pyramids, 27.
Science, 26.
Social Conditions, 26.
Temples, 27.
Writing, 26.
Misr, 58, 59, 68, 69.
Moeris, 26, 162.
Mohammed, 40, 55, 58, 77, 78, 110, 300.

Ali, 12, 46, 54, 65, 73, 332, 349.
Ahmed, 42, 332.
Mohammedanism, 332.
Mohammedans, 345.
Montu, 203.
Moses, 78.
Moslem Period, 40, 16, 55.
Art, 11.
Language, 11.
Moslems, 46, 69, 77, 78, 79, 80, 81, $82,109,121,142,155,212$, 219, 332.
Muezzins, $70,77$.
el Muizz, 59.
Munich, 93.
Mut, 220.
Mycenae, 30, $14 \overline{0}$.
Mykerinos, 107.

## N

Nahum, 206.
Napata, 36, 37.
Napoleon, 12, 110, 178, 261, 300.
Naukratis, 37, 146.
Naville, 156, 157, 269, 270.
Nebet-towe, 334.
Nebuchadrezzar, 38.
Negm ed-Din, 79.
Nekhab, 299.
Nektanebos, 38, 324.
Neos Dionysos, 302.
Nero, 200, 253.
Neufeld, 346.
Newberry, Mr., 289.
New Testament, 175, 332.
New York Obelisk, 153.
Nile River, $20,33,72,73,81,80$, 90, $91,92,93,94,96,98$, $18,19,21,28,39,48,52,55$, $56,57,85,102,103,120,121$, 147, 158, 159, 167, 173, 187, 201, 202, 208, 227, 258, 260, 261, 274, 277, 279, 286, 295, $300,301,319,320,321,323$, $325,326,328,331,333,349$.
Blue Nile, $1(00,18,36,345,348$, 349, 350, 551.

Nile River-(Continued).
White Nile, 18, 345, 348, 349, 350.

Damietta Mouth, 19.
Kosetta Mouth, 19.
Second Cataract, $98,342$.
Nile Valley, $20,11,12,13,17,19$, $26,27,36,43,48,49,53,57$, $107,118,119,122,162,198$, 268.

Geography and Climate of, 17, 18, 20.
Nilometer, 86, 313, 314.
Nineveh, 205, 226.
No-Amon, 205.
Nofretere, 334.
Notre Dame Cathedral, 235.
Nubia, 26, 28, 30, 52, 204, 216, 278, $286,310,312,315,318,319$, $328,329,330,332,342,343$, 344.

Nubians, $25,36,43,45,145,315$, $316,318,331,336$.

0
Ohrwalder, Father, 347.
Old Kingdom, 22, 23, 27, 28, 37, 44, $51,124,143,162,164,177$, $182,193,198,200,204,311$, 316, 318.
Art, 23, 89, 92.
Civilization, $21,22$.
Classes of people, 23.
Fall of, 25, 44.
Literature, 23.
Pyramids of, 25, 26.
Religion, 23.
Old Testament, 27, 33, 101, 153, 177, 180, 248, 249, 309.
Omar, 40, 58.
Omdurman, 52, 344, 347, 348.
Tomb of Mahdi, 99, 344.
On (Heliopolis), 153.
Opet, Southern, 203, 204.
Opet of the Thrones, 203, 204.
Orontes, 217.
Osiris, 188, 189, 190, 191, 196, 256, 259, 266, 335, $340,341$.
Osorkons, 35.

## P

Palestine, 24, 27, 28, 29, 30, 31, 32, $33,34,35,37,74,94,101$, 184, 244, 248, 249, 297.
Papyrus. 39.
Paris, National Library, 196, 244. Obelisk, 217.
Parohu, 273.
Pelusium, 38, 45.
1'epi II, 311 .
Perrot, Chas., 92.
Persia, 38, 75, 226.
Persian Period, 38, 45.
Persians. 43, 45 110, 166, 219, 237.
Petrie, Prof., 98, 132, 135, 146, 163 , 260, 262.
Pharaohs, 17, 22, 23, 24, 27, 32, 38, $39,40,41,53,57,69,86,103$, $106,110,123,128,145,152$,


Philadelphus, 174.
Philae (Plan 18), 89, 90, 52, 122, $162,291,318,320,321,322$, 323, $326,328$.
Temple of Isis, $\mathbf{8 9}, \mathbf{9 0}, \mathbf{9 1}, \mathbf{3 8}$, $197,321,323,326,328$.
Philistines, 297.
Phoenicia, 27, 32, 98.
Physcon, 324.
Piankhi, 36.
Pithom, 51, 156, 157.
Store-chambers, $32,156,175$.
Plato, 153.
Political Conditions, 22.
Pompey's Pillar, 1, 53, 64, 55.
Pompey, Tomb of, 54.
Predynastic Kingdoms, 21, 44.
Introduction of Calendar, 44.
Psamtik (Psammetichos), 37.
I'samtik II, 339.
III, 38.
Ptah, 341.
Ptolemy I, 39, 45, 63.
III, 301.
IX, 324.
Ftolemies, 39, 53, 142, 150, 173, 198, $222,223,243,302,304,319$. 324, 331, 339.
Punt, 28, 272, 273, 274, 312.
Put, 205.
Pyramids,
Gizeh, 4, 16, 22, 23, 24, 25, $\mathbf{2 7}, 51,57,68,69,70,87,96$, 102, $104,146$.
Great Pyramid, 17, 18, 19,
$26,105,108,109,111,115$,
$118,120,122,126,137,139$.
$147,148,150$.
Entrance to, 23, 128.
Interior, 24, 130.
King's Chamber, 25, 132.
Second Pyramid, 21, 27, 122. 140.

Hawara, 161, 183.
Illahun, $34,123,161$.
Sakkara, 29, 147, 148, 319.

## R

Ramadan, Fast of, 66.
Ramesseuin (Temple of Ramses II) (Maps 8 and 9, Plan 13), 47, 65, 66, 67, 206, 251, 254, $258,261,262,263,264,269$, $274,276,282,287,317,340$, 341.

Colossus of Ramses II, 66, 258 , 282.

Ramessids, 34, 238, 283.
Ramses I, 44, 281, 287, 288.
II, 29, 32, 33, 34, 44, 88, 94, $101,142,156,157,173,190$, $194,210,212,216,217,224$, $225,235,246,247,251,254$.

Ramses-(Continued).
$257,258,259,260,285,287$, $288,317,334,335,339,340$, 341.

Statue of $28,144,146,228$, 334, 336.
III, 33, $34,35,44,153,220,290$, 291, 292, 293, 294, 297, 298, 307.

IV, 238.
VI, 238, 281.
IX, 284.
XI, 281.
XII, 34, 281.
Re, 30, 193, 245.
Red Sea, 17, 20, 24, 25, 27, 57, 81, $119,155,184,221,270,271$, 272, 312.
Re-Harmachis, 341.
Rehoboam, 228, 249.
Restoration, $37,45$.
Naval Power, 37.
Roman Emperors, 40.
Roman Empire, 40, 46, 331.
Roman Period, 39, 45.
Architecture, 89.
Art, 39.
Romans, 43, 58, 142, 205, 225, 237, 252, 331.
Rome, 39, 110, 144, 145, 198, 219, 226, 241, 338.

## S

Sebni, 312.
Sahara, 21, 18, 19, 20, 57, 105, 119, $122,162,172,181,184,279$, 309.

Said Pacha, 65.
Sais, 37.
Saites, 37.
Sakieh, $36,168$.
Sakkara, 25, 27, 126, 133, 147.
Pyramid, 29, 147, 148, 319.
Saladin, 29, $40,41,46,64,75,79$. 332.

Citadel, 3, 56, 59, 64, 65, 67, $68,70,75,78,86,332$.
Sappho, Poems of, 175.
Sardinians, 297.
Satet, 320.
Satrap, 45.
Sebek, 173.
Sehel, Island of, 88, 318, 332.
Seine, 325.
Semites, 21, $27,33$.
Sen-nofer, $265,266,277,289$.
Tomb of, 69, 265, 266, 277, 289.
Senwosret, 153.
Septimius Severus, 252.
Serapeum, 150.
Serapis, 150.
Temple of, 54.
Service des Antiquités, 137, 155, 229.
Sesostris $1,153,154,238$.
III, 26, 32, 188.
Sesostrises, 26, 33.
Set, 67.

Sethos I, 32, $44,55,94,95,100,101$, $146,189,190,191,194,195$, $246,248,281,285,287,288$, 289.

Body of, 12, 94, 189, 194, 246, 283, 336.
Mortuary Temple of, 76, 287.
Tomb of 74, 75, 282.
Sethos II, 224.
Shaduf, 35, 167.
Sharuhen, 27.
Shawwal, 66.
Sheger ed-Durr. 79.
Shekh Abd el-Kurna, 263.
Shellal, 328.
Shems ed-Din, 332.
Sheshonk, 35, 248, 249.
Sheshonks, 35.
Silsileh, 278.
Sinai Peninsula, 20, 24.
Sisatet, 188, 189.
Slatin, Pacha, 346.
Snofru, 24, 148, 162.
Soane's Museum, 283.
Sohag: 185.
Sohagiyeh, 185.
Solomon, 228, 248, 249, 272.
Somali Coast, 24, 28, 270, 272.
Sphinx, 17, 26, 27, 89, 109, 109, 137, $140,316$.
Stereographs, 12.
Selection of, 15.
Use of, 47.
Stereoscope, 47, 50.
Sudan, 18, 25, 43, 46, 52, 81, 310 . $311,344,345,347,348,349$, 350, 351.
Rebellion, 42.
Suez, 81.
Canal, 155, 156.
Gulf, 25.
Isthmus, $28,74$.
Syria, 27, 28, 29, 31, 32, 33, 37,40 . $42,69,157,189,216,217,235$, 244, 245, 246, 267.

## $T$

Takelots, 35.
Talmis, 329.
Tanis, $34,157,260,317$.
Tanutamon, 36.
Tenea, 93.
Tell el-Amarna, 30, 31.
Tell el-Kebir, 42, 46, 110.
Tewosret, Queen, 262.
Theban Princes, 25, 27.
Thebes (Maps 8 and 9 ), 25, 26, 28, $29,30,32,33,34,36,44,45$, $51,52,96,100,110,121,122$, $144,152,157,166,167,173$, 181, 182, 203, 205, 278.
Plain of, $47,66,67,68,73$, 201, 202, 258, 261, 263, 277.
Karnak (Map 8, Plan 11 and 12), 201, $203,205,206,208$, $213,214,215,217,218,219$, $259,273,269,271,280,289$, $293,298,304,315,342$.

Thebes-(Continued).
Temple of Amon (Plan 12), 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, $35,94,103,153,196,205$, $218,220,222,224,226$, $231,233,236,239,242$, 244, 246, 248, 307.
Sacred Lake, 58, 233, 235, 239, 245.
Luxor (Map 8), 47, 72, 201, 202, 203, 205, 206, 207, 218, 219, 220, 222, 227, 232, 234, 237, 251, 258, 274, 341.
Temple (Map 8, Plan 10), $48,49,50,51,207,211$, 213, 215, 235.
Obelisk, 51, 215, 217, 315.
Medinet Habu, 68, 77, 78, $79,190,206,263,275,287$, $288,289,290,291,294,295$, 298.

Memnon Stat ues, 47, 64, 67, 202, 206, 251, 257, 260, 261, 269, 271, 275, 276, 281.
Mortuary Temple of Sethos I, 76, 287.
Ramesseum (Temple of Ramses II) (Maps 8 and 9, Plan 13), 47, 65, 66, 67, 206 251, 254, 258, 261, 262, 263, 264, 260, 274, 275, 282, 287, 317, $340,341$.
Colossus of Ramses II, 66, 258, 282.
Temple of Der el-Bahri (Maps 8 and 9, Plan 14), 70, 71, 206, 263, 268, 270 , 271, 274, 275, 277, 284, 287, 289, 296, 316.
Temple of Kurna, 206, 275, 290, 292.
Tomb of Prince Sen-nofer, 69, 265, 266, 277, 289.
Valley of the King's Tombs, 74, 279.
Tomb of Sethos I, 74, 75, 282.

Theodosius I, 40, 40, 306, 325. Thinis, 44.

Threshing in Modern Egypt, :57, 169. Thutmosis 1, 28, 103, 223, 230, 232, $236,238,239,240,243,264$, 280, 316.
II, 271.
III, 29, 30, 32, 33, 196, 212, 240, $241,243,244,245,248,271$, 275, 276, 281.
IV, 141, 241, 262, 280.
Tiberius Cæsar, 198, 200, 324.
Tigris Valley, 17.
Tigro-Euphrates Valley, 31.
Trojan War, 253.
Tulunids, 46.
Turin, 337.
Turkey, 42.
Turkish Period, 42, 46.
British Rule, 43.
Prosperity, 43.
Title of Khedive, 42.
Turks, 42, 43, 110.
Turra Quarries, 151.
Tuti, 348, 349.
Tuye, 334.
Una, 24.
Usermare-Setepnere, 335.

## V

Valley of the King's Tombs, 74, 279. Tomb of Sethos I, 75, 282.
Victoria Nyanza, 18.
Vyse, Col. Howard, 13 中.
W
Wadi Half3, 42, 52, 343, 344, 845 , 348.

Wadi Tumilat, 156.
Wilson, Gen. Sir Charles, 845.
Winnowing Grain, 38, 171.
$\mathbf{Y}$
Yusuf, Bahr, 163.
Yusuf, Mosque of Emir, 6, 73.
Z
Zoser, King, 147, 148, 149, 150, 319. 320,

## THE TRAVEL LESSONS

## ON THE LIFE OF JESUS

## ON THE OLD TESTAMENT

REV. WILLIAM BYRON FORBUSH, PH.D., author of "The Boy Problem," has worked out by actual experience with his famous Bible class, these original, inspiring Bible Study courses.
"THE TRAVEL LESSONS ON THE LIFE OF JESUS," giving 36 standpoints, with a complete handbook, 204 pages, in cloth, 3 patent maps and case.
"THE TRAVEL LESSONS ON THE OLD TESTAMENT," divided into 4 courses, giving 51 standpoints in all, complete handbook, 211 pages, 5 patent maps and case.

Separate courses as follows:
Course I.-The Patriarchs of Israel, 13 places.
" II.-The Founders of the Kingdom, 15 places.
" III.-The Early Kings and Prophets, 14 places.
" IV.-The Later Kings and Prophets, 9 places.
Both Old and New Testament courses are arranged to accompany International, Blakeslee's, Davis', Murray's and all SundaySchool and personal Bible Study courses, or may be used independently. They solve these problems: Attendance, order, interest in Bible, real religious education. They introduce an entirely new method and apparatus which makes an addition of permanent and constant value to the equipment for Bible study classes.

THE PLAN OF THESE TRAVEL LESSONS is to teach Biblical history while the student is in the very presence of the places in Palestine where that history was enacted.

## EX-GOV. JOHN L. BATES, MASS.:

"So realistic and natural is the scene made that one feels that he is beholding the actual scenery; he obtains the inspiration that actual sight gives."
GEO. A. GORDON, D.D.:
"After looking over your stereographs of Palestine one feels as if he bad looked upon natural scenery itself."
O. E. BROWN, D.D.:
"The use of the handbooks and maps prepares one to look upon the scenes with a perfectly definite sense of location, and they do actually produce the realization of having seen the actual locality and not merely a picture of it." THE SUNDAY SCHOOL TIMES:
"Dr. Forbush is proving in his own Sunday-School that it is possible to get a class of twenty-five healthy, restless American boys as much interested in studying the life of Christ as they are in football scores."
MR. EDWIN F. SEE, GEN. SECY., BROOKLYN Y. M. C. A.:
"I have examined with great care and used in class work stereoscopes and stereographs suggested for the use of Bible courses by Dr. Forbush through Underwood \& Underwood. It gives what is very much needed, reality to the persons and scenes of the Bible."

Send for Dr. Forbush's free descriptive circular of either or both of these courses to Underwood \& Underwood, Bible Study Dept., 3-5 West 19th street, corner Fifth avenue, New York City.

## THE UNDERWOOD STEREOGRAPHS

Millions of dollars have been spent in the last decade for photographs and illustrations of one kind or another, and yet only recently has the importance of the one great fundamental difference in illustrations been realized-that is, the difference between photographs based on the principle of two-eye vision and photographs based on the principle of one-eye vision, or the difference between stereoscopic and all other kinds of photographs. Not many years ago Professor Le Conte wrote in his book on Sight, "the field of binocular (two-eye) phenomena is a closed world, to most, even intelligent, people." In the last few years, however, fuller knowledge has come and educators concede that in the stereograph we have the climax oí all illustrations.

And then, the use of the stereoscope was for many years limited to that of amusement and entertainment. As one paper recently said. "It seems to be the fate of every great scientific discovery to serve a kind of apprenticeship to the almost childish wonder and curiosity of the general public. For many years the stereoscope was regarded as a toy. The use that was made of it, except by a limited number of thinking people, was unworthy of the great discovery of Sir Charles Wheatstone."

In recent years all this has changed. With a wider knowledge of the true nature of stereographs there has sprung up among educators generally a recognition of tremendous fields of usefulness for the stereoscope, in the public school, the Sunday-school, and in the home. Great progress has already been made. In response to these demands, not only have Underwood \& Underwood sent stereoscopic photographers through all the more important parts of the earth, and under the supervision of the best authorities, but an entirely new and unique map system has been invented (see back cover of this book) and systematic tours through many countries have been arranged and written up by such men as Dr. James H. Breadsted, of Clicago University, on Fgypt ; Dr. Jesse L. Hurlbut, on Palestine ; Dr. D. J. Ellison and Dr. James C. Egbert, Jr., of Columbia University, on Italy, etc. This new movement is already world-wide. A leader in the Philippines writes:

[^110]Rev. Richard Burgess, General Secretary India S. S. Union, says:
"The lantern slide, map, object, curio. etc., have their special advantages as educators, bitt these sterecgraphs, combined with the unique
system of patent maps giving the sense of location and dircction looking together with the well-written guide-books, are capable, in my judgment, of becoming, to one who uses them thoughtfully, not a suhstitute for travel merely, but travel itself in the highest sense of the term."
In this country and England hundreds of educators urge the use of the stereoscope. Dr. Winship, Editor of The Journal of Education, declares:
"It is as absurd to study history or geography without adequate firsthand experience of seeing places, things and people with the lifelike realism of the stercoscope, as to study natural sciences without a lahoratory. Sense experience should be the foundation stone of mindbuilding.'
George J. Smith, Ph.D., Board of School Examincrs, New York, states:
"In late years there has heen perfected something that, in my judgment, goes ahead of ordinary pictures, and quenches the mind's thirst for the concrete almost as completely as the very object before the bodily sight. I refer to the stereograph. Even the best pictures we still feel to be but pictures; they do not create the illusions of reality, solidity, depth. 'The hest in this kind are hut shadows.' But with the stereoscope the wonder of photography is brought to its culmination."
Jaques W. Redway, Fellow of the R. G. S., says:
"It is evident that whole classes may use stereoscopic photographs in the ordinary work of demonstration, or the pupil may study them in his individual field work, indoors as well as out of doors. In the study of foreign countries and their people, there are great opportunities. And, indeed, in the use of the stereoscope and stereoscopic photograph there is an entirely new field to be opened. It is a field that hitherto has heen closed to hoth teacher and pupil, and to hoth there are possibilities of study and research that are little dreamed of. In my own studies they have been a revelation."
It might give some further idea of the place stereoscopic photography is taking to-day to say that the one photographer wivited to accompany President McKinley and afterward President Roosevelt, on all their more important journeys, is a stereoscopic photographer, Mr. H. A. Strohmeyer, vice-president of Underwood \& Underwoor ; and, further, the most celebrated war photographer in the field today, whose work with the Japanese army at Port Arthur is wor!dfamous, is a stereoscopic photographer, Prof. James Ricalton, also of Underwood \& Underwood's staff.

Probably it should be stated herc that stereographs differ vastly in their quality, reliability and in the helps that accompany them. It should not be expected that the results spoken of above could be gotten from the inferior stereographs so commonly put on the market.

Drop a postal card for further information to

# UNDERWOOD Stereoscopic Tours 

The Underwood Stereoscopic Tours are put up in neat Volume Cases, or Underwood Extension Cabinets, and the stereographed places are arranged in the order in which a tourist might visit the actual seenes.

Note that these are all Original Stereographs, not copies.
To accompany these Tours we recommend our "Twentieth Century" Aluminum Mahogany Stereoscopc. A higher-priced stereoscope can be furnished if desired.

CHINA TOUR.-Giving 100 standpoints, with guide book, 358 pages, in cloth, by James Ricalton, eight patent maps and case.
Boxer Uprising Tour. - Cheefoo, Taku, Tientsin- (a part of the China Tour) -Giving 26 standpoints, with guide book, three patent maps and case.
Hongkong and Canton Tour (a part of the China Tour)-Giving 15 standpoints, with guide book, tirce patent maps and case.
Pekin Tour (a part of the China Tour)-Giving 32 staudpoints, with guide book, two patent maps and case.

EGYPT TOUR.-Giving 100 standpoints, with guide book, 360 pages, in cloth, by James H. Breasted, Ph.D., twenty patent maps and case.

GRAND CANYON OF ARIZONA TOUR.-Giving 18 standpoints, with guide book, two patent maps and case.

ITALY TOUR.-Giving 100 standpoints, with guide book, 602 pages, in cloth, by D. J. Ellison, D.D., ten patent maps and case.
Rome Tour (a part of the Italy Tour)-Giving 46 standpoints, with guide book, 310 pages, in cloth, by D. J. Ellison, D.D., five patent maps and case.

NIAGARA FALLS TOUR.-Giving 18 standpoints, with guide book, two patent maps and case.
PALESTINE TOUR. -Giving 100 standpoints, with guide book, 220 pages, in cloth, by Jesse L. Hurlbut, D.D., seven patent maps and case.
Jerusalem Tour (a part of the Palestine Tour)—Giving 27 standpoints, with guide book, patent map and case.

PILGRiMAGE TO SEE THE HOLY FATHER TOUR. -Giving 26 standpoints, with explanatory notes on backs of stercographs, guide book, 71 pages, in cloth, patent map and case.
PRESIDENT M'KiNLEY TOUR No. 5.-Giving 60 standpoints, with guide book, 183 pages, in cloth, and leatherette case.
PRESIDENT M'KINLEY TOUR No. 2.-Giving 24 standpoints, with case.
PRESIDENT ROOSEVELT TOUR.-Giving 36 standpoints, with case.

REAL CHILDREN IN MANY LANDS TOUR.-Giving 18 standpoints, with guide book, 222 pages, in cloth, by M. S. Emery, and case.

RUSSIA TOUR.-Giving 100 standpoints, with guide book, 216 pages, in cloth. by M. S. Emery, ten patent maps and case.
Moscow Tour (a part of the Russia Tour)-Giving 27 standpoints, with guide book, three patent maps and case.
St. Petersburg Tour (a part of the Russia Tour)-Giving 39 standpoints, with guide book, five patent maps and case.
ST. PIERRE AND MT. PELEE TOUR.-Giving 18 standpoints, with guide book, by George Kennan, patent maps and case.
SWITZERLAND TOUR.-Giving 100 standpoints, with guide book, 274 pages, in cloth, by M. S. Emery, eleven patent maps and case.
Bernese Alps Tour (a part of the Switzerland Tour)-Giving 27 standpoints, with guide book, three patent maps and case.
Engadine Tour (a part of the Switzerland Tour)-Giving 8 standpoints, with guide book, four patent maps and case.
Lake Lucerne Tour (a part of the Switzerland Tour)-Giving 11 standpoints, with guide book, three patent maps and case.
Mont Blanc Tour (a part of the Switzerland Tour)-Giving 23 standpoints, with guide book, two patent maps and case.
Zermatt Tour (a part of the Switzerland Tour)-Giving 15 standpoints, with guide book, two patent maps and case.

TRIP AROUND THE WORLD TOUR.-Giving 72 standpoints, with explanatory notes on backs of stereographs, guide book, 56 pages, map and case.

UNITED STATES TOUR.-Giving 100 standpoints, with explanatory notes on backs of stereographs, guide book, 72 pages, four patent maps and case.

WASHINGTON TOUR.-Giving 36 standpoints, and 6 standpoints in environs, with guide book, 178 pages, in cloth, by Rufus Rockwell Wilson, four patent maps and case.
WORLD'S FAIR TOUR (Louisiana Purchase Exposition)-Giving 55 standpoints, with explanatory notes on backs of stereographs, with guide book, patent map and case.

YELLOWSTONE NATIONAL PARK TOUR.-Giving 30 standpoints, with ex. planatory notes on back of stereographs, with guide book, patent map and case.

YOSEMITE VALLEY TOUR.-Giving 24 standpoints, with guide book, by Chas. Q. Turner, patent map and case.

The following "Tours" are not, as yet, provided with special maps and guide book, but the full, descriptive titles given to identify each outlook will be found of great practical assistance in studying the countries in question:

AUSTRIA TOUR.-Giving 84 standpoints, with case.
BELGIUM TOUR.-Giving 24 standpoints, with explanatory notes on backs of stereographs, with case.

BRITISH BOER WAR TOUR.-Giving 72 standpoints, with case.
CEYLON TOUR.-Giving 30 standpoints, with case.

CUBA AND PORTO RICO TOUR.-Giving 100 standpoints, with case.
DENMARK TOUR.-Giving 36 standpoints, with case.
ENGLAND TOUR.-Giving 100 standpoints, with case.
FRANCE TOUR.-Giving 72 standpoints, with case.
GERMANY TOUR. - Giving 100 standpoints, with case.
GREECE TOUR.-Giving 100 standpoints, with case.
HOLLAND TOUR.-Giving 24 standpoints, with explanatory notes on backs of stereographs, with case.
INDIA TOUR.-Giving 100 standpoints, with explanatory notes on backs of stereographs, with case.

IRELAND TOUR.-Giving 100 standpoints, with explanatory notes on backs of stereographs, with case.

JAPAN TOUR.-Giving 100 standpoints, with explanatory notes on backs of stereographs, with case.
KOREA TOUR.-Giving 48 standpoints, with case.
MANCHURIA TOUR.-Giving 36 standpoints, with case.
MEXICO TOUR.-Giving 100 standpoints, with case.
NORWAY TOUR.-Giving 100 standpoints, with case.
PHILIPPINES TOUR.-Giving 100 standpoints, with case.
PORTUGAL TOUR.-Giving 60 standpoiats, with case.
PRINCE HENRY TOUR.-Giving 24 standpoints, with case.
RUSSO-JAPANESE WAR TOUR.-Giving 100 standpoints, with case.
SCOTLAND TOUR.-Giving 100 standpoints, with case.
SPAIN TOUR.-Giving 100 standpoints, with case.
SWEDEN TOUR.-Giving 100 standpoints, with case.
Other interesting and instructive tours can be made up from the large collection of original sterecgraphs always in stock, or from new stereographs which are constantly being added.

We advise our customers to purchase complete tours on the countries they may be interested in. One hundred stereographed places of one country will generally give much better satisfaction than the same number scattered over several countries. Many of our patrons are placing all ol our educational tours in their homes alongside of the standard works on those countries. Schools and public libraries are turning more and more to the stereoscope to put their students and readers in touch with the actual places of which they are studying. The United States Government considered them so valuable that all educational tours published to date, with the new Underwood Extension Cabinet, were purchased for the United States Military Academy at West Point.

When two or more of the " 100 " tours are wanted, we recommend the "Underwood Extension Cabinet." It can be "built up" from time to time, as desired, bolding from 200 to 2,000 stereographed places, or more.

## UNDERWOOD \& UNDERWOOD

3-5 West 19th Street, Corner Fifth Avenue, New York
LONDON, ENGLAND.
SAN FRANCISCO, CALIFORNIA.

Date Due


## DT55.B8

Egypt through the stereoscope;
Princeton Theological Seminary-Speer Library


11012000236333


[^0]:    *Oliver Wendell Holmes contributed two articles on the Steresscope and Stereoscopic Photographs to The Atlantic Monthly. These articles have been republished by Underwood \& Underwood, and will be sent on request.

[^1]:    *DETAILS TO BE OBSERVED.
    First-Move the slide, or carrier, which holds the stereograph, to the point on the shaft of the stereoscope where the subjects in the scene can be seen most distinctly.

    Second-Have a strong, steady light on the stereograph. This is often best obtainable by sitting with the window or lamp at one side, letting the light fall over the shoulder.

    Third-Hold the stereoscope with the hood close against the forehead and temples, shutting off entirely all immediate surroundings.

[^2]:    Position 2. Map 4.

[^3]:    Position 2. Map 4.

[^4]:    Position 4. Map 4.

[^5]:    Position 4. Map 4.

[^6]:    Position 8. Map 4.

[^7]:    Position 9. Map 4.

[^8]:    Position 9. Map 4,

[^9]:    Positions 10, 11. Map 4.

[^10]:    Positions 11, 12. Map 4.

[^11]:    Position 12. Map 4.

[^12]:    Position 13. Map 4.

[^13]:    Position 13. May 4.

[^14]:    Position 15. Map 4.

[^15]:    Positions 15, 16. Map 4.

[^16]:    Position 16. Map 4.

[^17]:    Position 17. Map 5.

[^18]:    Position 18. Map 5.

[^19]:    Positions 19, 20. Maps 4, 5.

[^20]:    Position 20. Maps 4, 5.

[^21]:    Positions 20, 21. Map 5.

[^22]:    Position 21. Map 5.

[^23]:    Position 22. Map 5.

[^24]:    Position 24. Plan of Pyramid interior, p. 129.

[^25]:    Position 25. Plan of Pyramid Interior, p. 129.

[^26]:    Position 25. Plan of Pyramid Interior, p. 129.

[^27]:    Position 25. Pian of Pyramid Interior, p. 129.

[^28]:    Position 26. Map 5.

[^29]:    Position 28. Map 4.

[^30]:    Position 29. Map 4.

[^31]:    Position 31. Map 4.

[^32]:    Positions 31, 32. Map 3.

[^33]:    Position 32, Map 3.

[^34]:    Positions 32, 33. Map 3.

[^35]:    Position 33. Map 3.

[^36]:    Position 34. Map 6.

[^37]:    Position 37. Map 6.

[^38]:    Position 38. Map 6.

[^39]:    Position 39. Map 6.

[^40]:    Position 40. Map 3.

[^41]:    Position 41. Map 3.

[^42]:    Positions 41, 42. Map 3.

[^43]:    Position 43. Map 3. Plan 7.

[^44]:    Position 45. Map 3. Plan 7.

[^45]:    Position 46. Map 3.

[^46]:    Position 46. Map 3.

[^47]:    Position 47. Maps 3, 8.

[^48]:    Position 47. Maps 3, 8.

[^49]:    Position 47. Maps 3, 8.

[^50]:    Position 48. Maps 3, 8. Plan 10.

[^51]:    Position 48. Maps 3, 8. Plan 10.

[^52]:    Position 49. Maps 3, 8. Plan 10.

[^53]:    Positions 49, 50. Maps 3, 8. Plan 10.

[^54]:    Position 51. Maps 3, 8. Plan 10.

[^55]:    Position 51. Maps 3, 8. Plan 10.

[^56]:    Position 56. Maps 3, 8. Plans 11, 12.

[^57]:    Position 56. Maps 3, 8. Plans 11, 12.

[^58]:    Positions 56, 57. Maps 3, 8. Pian 12.

[^59]:    Position 58. Maps 3, 8. Plan 11.

[^60]:    Position 58. Maps 3, 8. Plan 11.

[^61]:    Positions 58, 59. Maps 3, 8. Pians 11, 12.

[^62]:    Position 60. Maps 3, 8. Plans 11, 12.

[^63]:    Positions 60, 53 (return). Maps 3, 8. Plans 11, 12.

[^64]:    Positions 53, 61. Maps 3, 8. Plans 11, 12.

[^65]:    Pasition 62. Maps 3, 8. Plans 11, 12.

[^66]:    Position 63. Maps 3, 8. Plans 11, 12.

[^67]:    Position 63. Maps 3, 8. Pians 11, 12.

[^68]:    Position 64. Maps $3,8,9$.

[^69]:    Position 65. Maps 3, 8, 9. Plan 13.

[^70]:    Position 65. Maps 3, 8, 9. Pian 13.

[^71]:    Positlons 65, 66. Maps 3, 8. Plan 13.

[^72]:    Position 66. Maps 3, 8. Plan 13.

[^73]:    Positions 66, 67. Maps 3, 8, 9.

[^74]:    Position 67. Maps 3, 8, 9.

[^75]:    $v \quad$ Position 69. Maps 3, 9.

[^76]:    Position 69. Maps 3, 9.

[^77]:    Positlons 69, 70. Maps 3, 9. Plan 14.

[^78]:    $\overrightarrow{\text { Position 70. Maps 3, 9. Plan 14. }}$

[^79]:    Positions 70, 71. Maps 3, 9. Plan 14.

[^80]:    Position 71. Maps 3, 9. Plan 14.

[^81]:    Positions 71, 72. Maps 3, 8, 9.

[^82]:    Positions 72, 73. Maps 3, 8.

[^83]:    Positions 73, 74. Maps 3, 8, 9.

[^84]:    *Remember that you will find the valley on a larger scale, with the numbers and location of the tombs more clearly given, in the upper left-hand corner of Map 9 .

[^85]:    Positions 74, 75. Maps 3, 9.

[^86]:    Positions 75, 65 (return). Maps 3, 8, 9.

[^87]:    Position 65. Maps 3, 8, 9.

[^88]:    Position 68. Maps 3, 9.

[^89]:    Positions 68, 77. Maps 3, 9. Plan 15.

[^90]:    Position 77. Maps 3, 9. Plan 15.

[^91]:    Position 79. Maps 3, 8. Plan 15.

[^92]:    Positions 79, 80. Map 3.

[^93]:    Position 81. Map 3. Plan 16.

[^94]:    Position 82. Map 3. Plan 16.

[^95]:    Positions 82, 83. Map 3. Plan 16.

[^96]:    Positions 84, 85. Maps 3, 17.

[^97]:    Position 85, Maps 3, 17.

[^98]:    Position 86. Maps 3, 17.

[^99]:    Position 87. Maps 3, 17.

[^100]:    Position 88. Maps 3, 17.

[^101]:    Position 89. Maps 3, 17, 18.

[^102]:    Position 90. Maps 3, 17, 18.

[^103]:    Positions 91, 92. Map 3.

[^104]:    Positions 92, 93. Map 3.

[^105]:    Position 93. Map 3.

[^106]:    Positions 94, 95. Map 3. Plan 19.

[^107]:    Positions 96, 97. Map 3. Plan 19.

[^108]:    Position 99. Maps 3, 20.

[^109]:    *The sterograph numbers are given in heavy type, and the book pages in light type.

[^110]:    "Your views are beyond praise; but that is not as significant to me as the fact that, for the first time, you have grasped the possibilities of the invention as a cultural factor in our modern life."

